



Bring It On!

Book 1: Mental Strategies Worksheets

LICENSE TERMS / COPYRIGHT NOTICE

IMPORTANT NOTICE

Your use of this resource is bound by the following terms and conditions. Continued use for any purpose is taken to imply acceptance of these terms in their entirety.

If you do not agree with these terms, you must cease using this document and delete all copies.

1. This is a **members-only resource**. It must not be shared with or used by non-members.
2. This digitally downloaded resource is licensed, not sold, and at all times remains the sole intellectual property of Courageous Investing Pty Ltd, trading as Professor Pete's Classroom.
3. This resource is licensed for exclusive use by the current member at Professor Pete's Classroom who originally downloaded it from profpete.com. It is not covered by any shared license, copyleft, Creative Commons or other scheme that is based on the idea that documents should be able to be freely shared with others.
4. As a current member at Professor Pete's Classroom, **you may print and duplicate copies of this resource's contents for use by your own students** exclusively.
5. DO NOT share this resource with people who are not current members at Professor Pete's Classroom.
6. If your membership at Professor Pete's Classroom expires and you do not renew your membership, you must delete all copies (hard copy or digital) in your possession.

Thanks for supporting our small home-based family business. We appreciate you!

Professor Pete's Classroom grants the original purchaser permission to photocopy the reproducible pages in this book for classroom use. No other part of this publication may be reproduced in whole or in part, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission of the publisher.

For information regarding permission, write to

Copyright, Professor Pete's Classroom, 50 Pioneer Road, Sheldon Qld 4157, Australia.

Bring It On! Mental Strategies Worksheets

Created by Trish Price & Peter Price

Cover photograph by Sean Locke via iStockphoto

ISBN: 978-1-922167-14-9

© 2012 Professor Pete's Classroom

All rights reserved.

Electronically produced in Australia

www.professorpetesclassroom.com

Duplication License

These materials are **not** licensed under a Creative Commons or similar “sharing” license.

Professor Pete's Classroom worksheets are licensed for distribution to students according to the terms of the following license. Use of these materials implies acceptance of this Duplication License; if you do not agree with the terms, you should cease use of the materials immediately and contact the copyright owner. Questions about this license should be directed to Professor Pete's Classroom.

1. The original purchaser of these worksheets may be either an individual teacher (including parent or homeschooler) or a school. If the purchaser is a school, this license extends to use by teachers on a single campus of the school. A separate copy of these materials must be purchased for teachers on a separate campus of the school.
2. The original purchaser is licensed to make as many copies as needed for the students of the purchaser, as often and for as long as is needed, for the lifetime of the purchaser.
3. The license applies to the original purchaser only, and may not be transferred or sold.
4. The materials covered by this license may be saved in electronic PDF or physical hardcopy form, by the original purchaser. A single backup copy of the material may be made for archive purposes only.
5. This license does not permit duplication of these materials for another teacher who is not either the original purchaser, or employed by the original purchaser. Sample pages from this eBook are available to be downloaded without payment at the Professor Pete's Classroom online store, at <http://store.classroomprofessor.com>.
6. Apart from use by the original purchaser for the purchaser's students, worksheets may not be repackaged or adapted in any form, including compilations, extracts, derivative works or other variations of the original materials.
7. Worksheets are not to be uploaded to any other website or server, except to an original school purchaser's intranet for use by that school's teachers on a single campus. Links from other websites to professorpetesclassroom.com are welcomed, but mirroring or duplicating Professor Pete's Classroom content on other sites is strictly prohibited.

Scope and Sequence – Developing Number Fluency “Times Tables”

Developing Fluency Worksheets Series

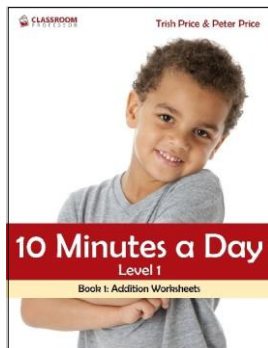
Grade 1 / Year 2



Four eBooks:

- Addition & Subtraction to 10
- Addition
- Subtraction
- Addition & Subtraction Revision

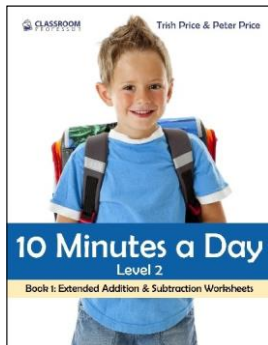
Grade 2 / Year 3



Four eBooks:

- Addition
- Subtraction
- Addition & Subtraction Revision
- Easy Multiplication & Division

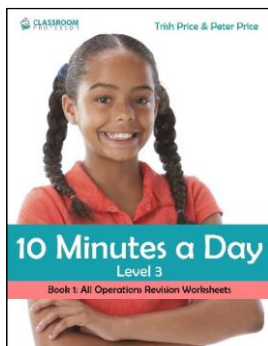
Grade 3 / Year 4



Four eBooks:

- Extended Addition & Subtraction
- Multiplication
- Division
- Multiplication & Division Revision

Grade 4 / Year 5



Four eBooks:

- All Operations Revision
- Extended Multiplication & Division
- Division with Remainders
- Factors & Multiples

Grade 5 / Year 6



Four eBooks:

- Mental Strategies
- All Operations Advanced Revision
- Fractions
- Percentages

Grade 5 / Year 6 eBooks series: Bring It On!

Each worksheets eBook contains:

- * Daily worksheets for 10 weeks
- * Carefully graded and sequenced activities
- * Lots of revision activities
- * 5 Checkup worksheets for assessment
- * 20 Homework worksheets with parents' advice
- * All answer keys
- * PDF download for easy access
- * Teaching strategies advice
- * 30-day money-back guarantee



Mental Strategies:

- Multiplying by 10, 100 or 1000
- Dividing by 10, 100 or 1000
- Doubling 2-digit & 3-digit nos
- Halving 2-digit & 3-digit nos
- Adding "nice" numbers
- Adding near 100
- Subtracting near 100
- Multiplying 2- & 3-digit nos x5
- Multiplying larger nos x50, x25
- Revision

All Operations Advanced Revision:

- Count on/back; Double
- Difference of; 5x, 10x
- Rainbow facts; 3x
- Doubles+1; 4x
- Near 10; 9x
- Remaining & Ext. Facts; 6x
- Doubling 2-digit numbers; 8x
- Halving 2-digit numbers; 7x
- Adding "nice" numbers
- Multiplying / dividing by 10, 100, 1000

Fractions:

- Multiplying by fractions
- Improper and mixed numbers
- Equivalent fractions
- Simplifying fractions - Comparing fractions
- Adding & subtracting fractions
- Adding & subtracting mixed nos
- Converting decimals & common fractions
- Advanced fractions to decimals
- Revision

Percentages:

- Introduction to percentages
- Converting common fractions to percent
- 10%, 10% discount
- 50%, 50% discount
- 25%, 25% discount
- 100%+
- 10% increase, 50% increase
- 100% increase, 200+% increase
- 1%, 0.5%
- Advanced percentages
- Percentage Revision



Contents: Bring It On! Mental Strategies

Classroom Worksheets

Multiplying by 10, 100 or 1,000	1[A] - 1[D]
Dividing by 10, 100 or 1,000.....	2[A] - 2[D]
Doubling 2-digit & 3-digit numbers	3[A] - 3[D]
Halving 2-digit & 3-digit numbers	4[A] - 4[D]
Adding "nice" numbers.....	5[A] - 5[D]
Adding near 100.....	6[A] - 6[D]
Subtracting near 100.....	7[A] - 7[D]
Multiplying 2- & 3-digit numbers x 5	8[A] - 8[D]
Multiplying larger numbers x 50, x 25	9[A] - 9[D]
Revision	10[A] - 10[D]

Check Up Worksheets

x 10, 100 or 1,000; \div 10, 100, 1,000.....	Check Up A
Doubling & Halving 2-digit & 3-digit numbers	Check Up B
Adding "nice" numbers; Adding near 100	Check Up C
Subtracting near 100; Larger numbers x 5	Check Up D
Larger numbers x 50, x 25; Revision.....	Check Up E

Homework Worksheets

Multiplying by 10, 100 or 1,000	1A HW
Dividing by 10, 100 or 1,000.....	2A HW
Doubling 2-digit numbers	3A HW
Halving 2-digit numbers	4A HW
Adding "nice" numbers.....	5A HW
Adding near 100.....	6A HW
Subtracting near 100.....	7A HW
Multiplying 2- & 3-digit numbers x 5	8A HW
Multiplying larger numbers x 50	9A HW
Revision	10A HW

Answer Keys




Recommended eBook	Description
<div data-bbox="199 289 602 807" data-label="Image"> </div> <p>Bring It On! Series:</p> <ul style="list-style-type: none"> • Mental Strategies • All Operations Advanced Revision • Fractions • Percentages 	<p>The <i>Bring It On!</i> series includes advanced worksheets which cover a range of topics, for students who have memorized all the number facts for the four operations. These eBooks may be used at a range of grade levels, starting in Grade 4.</p> <p>Book 1 of this series introduces students to a sequence of mental strategies which may be used in many contexts involving mental computation. For example, worksheets cover multiplying by powers of 10, doubling and halving 2- and 3-digit numbers, and adding and subtracting near 100.</p> <p>Book 2 is useful for students at this level to revise the four operations' number facts. This book should be used if students need to develop fluency with the basic facts, and will also introduce advanced facts involving larger numbers (e.g., $600 \times 3 = ?$; $2 \times 0.6 = ?$), and order of operations questions (e.g., $8 + 15 \div 5$).</p> <p>Book 3 covers a range of questions involving fractions, including finding equivalent fractions, converting common fractions to decimals, comparing fractions with like or unlike denominators, and adding and subtracting fractions with like denominators.</p> <p>Book 4 introduces students to percentages, and includes calculations involving converting common fractions to percentages, percentage discounts and increases, and percentages greater than 100% and less than 1%.</p>



Common Core State Standards for Mathematics		
<p>Grade 4 Number and Operations—Fractions</p> <p>Extend understanding of fraction equivalence and ordering.</p> <ul style="list-style-type: none"> Compare two fractions with different numerators and different denominators. Record the results of comparisons with symbols $>$, $=$, or $<$. <p>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <ul style="list-style-type: none"> Add and subtract mixed numbers with like denominators. 	<p>Grade 5 Operations & Algebraic Thinking</p> <p>Write and interpret numerical expressions</p> <ul style="list-style-type: none"> Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <p>Grade 5 Number and Operations—Fractions</p> <p>Use equivalent fractions as a strategy to add and subtract fractions</p> <ul style="list-style-type: none"> Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <p>Grade 5 Number and Operations in Base Ten</p> <p>Understand the place value system</p> <ul style="list-style-type: none"> Read, write, and compare decimals to thousandths. 	<p>Grade 6 Ratios and Proportional Relationships</p> <p>Understand ratio concepts and use ratio reasoning to solve problems</p> <ul style="list-style-type: none"> Find a percent of a quantity as a rate per 100; solve problems involving finding the whole, given a part and the percent.



Alignment with the UK National Curriculum for Mathematics (draft 21 June 2012)


Recommended eBook	Description
 <p>Bring It On! Series:</p> <ul style="list-style-type: none">• Mental Strategies• All Operations Advanced Revision• Fractions• Percentages	<p>The <i>Bring It On!</i> series includes advanced worksheets which cover a range of topics, for students who have memorized all the number facts for the four operations. These eBooks may be used at a range of Year levels, starting in Year 4.</p> <p>Book 1 of this series introduces students to a sequence of mental strategies which may be used in many contexts involving mental computation. For example, worksheets cover multiplying by powers of 10, doubling and halving 2- and 3-digit numbers, and adding and subtracting near 100.</p> <p>Book 2 is useful for students at this level to revise the four operations' number facts. This book should be used if students need to develop fluency with the basic facts, and will also introduce advanced facts involving larger numbers (e.g., $600 \times 3 = ?$; $2 \times 0.6 = ?$), and order of operations questions (e.g., $8 + 15 \div 5$).</p> <p>Book 3 covers a range of questions involving fractions, including finding equivalent fractions, converting common fractions to decimals, comparing fractions with like or unlike denominators, and adding and subtracting fractions with like denominators.</p> <p>Book 4 introduces students to percentages, and includes calculations involving converting common fractions to percentages, percentage discounts and increases, and percentages greater than 100% and less than 1%.</p>




Alignment with the UK National Curriculum for Mathematics (draft 21 June 2012)

National Curriculum for Mathematics	
Year 4	Year 5
Fractions Pupils should be taught to: <ul style="list-style-type: none">• identify and name equivalent fractions of a given fraction with denominator not greater than 12• write the equivalent fraction of a fraction given the denominator or the• numerator• reduce fractions to their simplest form• add and subtract two fractions with common denominators within one whole	Addition and subtraction Pupils should be taught to: <ul style="list-style-type: none">• add and subtract numbers mentally with increasingly large numbers.
Decimals Pupils should be taught to: <ul style="list-style-type: none">• compare numbers with the same number of decimal places up to 2 decimal places• find the effect of dividing a 2-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths• recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and any number of tenths and hundredths.	Multiplication and division Pupils should be taught to: <ul style="list-style-type: none">• multiply and divide numbers by 10, 100 and 1000 Fractions Pupils should be taught to: <ul style="list-style-type: none">• compare and order fractions with different denominators• recognise mixed numbers and improper fractions and convert from one form to the other• add and subtract fractions with the same denominator and related fractions; write mathematical statements that exceed 1 as a mixed number. Decimals Pupils should be taught to: <ul style="list-style-type: none">• read and write decimal numbers as fractions• recognise and use thousandths and relate them to tenths, hundredths and 100 decimal equivalents Percentage Pupils should be taught to: <ul style="list-style-type: none">• recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred” for example that 100% represents a whole quantity and 1% is $\frac{1}{100}$, 50% is $\frac{50}{100}$, 25% is $\frac{25}{100}$, etc.• write simple fractions as percentages and decimals as percentages (e.g. $\frac{1}{2} = 50\% = 0.5$).

Bring It On! series: Alignment with the Australian Curriculum

eBook Series	Series Titles	Australian Curriculum: Content Descriptions
 <p>The eBook cover for 'Bring It On! Book 1: Mental Strategies Worksheets' features a young girl in a yellow shirt and black pants performing a handstand. The title 'Bring It On!' is in large orange letters, and 'Book 1: Mental Strategies Worksheets' is in smaller black letters below it. The authors 'Trish Price & Peter Price' are listed at the top right.</p>	<p>Bring It On! Series:</p> <ul style="list-style-type: none"> • Mental Strategies • All Operations Advanced Revision • Fractions • Percentages 	<p>Year 4</p> <ul style="list-style-type: none"> • Investigate equivalent fractions used in contexts (ACMNA077) • Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation (ACMNA079) <p>Year 5</p> <ul style="list-style-type: none"> • Identify and describe factors and multiples of whole numbers and use them to solve problems (ACMNA098) • Compare and order common unit fractions and locate and represent them on a number line (ACMNA102) • Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator (ACMNA103) • Recognise that the place value system can be extended beyond hundredths (ACMNA104) <p>Year 6</p> <ul style="list-style-type: none"> • Identify and describe properties of prime, composite, square and triangular numbers (ACMNA122) • Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers (ACMNA123) • Compare fractions with related denominators and locate and represent them on a number line (ACMNA125) • Solve problems involving addition and subtraction of fractions with the same or related denominators (ACMNA126) • Multiply and divide decimals by powers of 10 (ACMNA130)

eBook Series	Series Titles	Australian Curriculum: Content Descriptions
 <p>[Continued]</p>	<p>Bring It On! Series:</p> <ul style="list-style-type: none"> • Mental Strategies • All Operations • Advanced Revision • Fractions • Percentages 	<p>Year 6</p> <ul style="list-style-type: none"> • Find a simple fraction of a quantity where the result is a whole number, with and without digital technologies (ACMNA127) • Make connections between equivalent fractions, decimals and percentages (ACMNA131) • Investigate and calculate percentage discounts of 10%, 25% and 50% on sale items, with and without digital technologies (ACMNA132) <p>Year 7</p> <ul style="list-style-type: none"> • Investigate index notation and represent whole numbers as products of powers of prime numbers (ACMNA149) • Compare fractions using equivalence. Locate and represent positive and negative fractions and mixed numbers on a number line (ACMNA152) • Express one quantity as a fraction of another, with and without the use of digital technologies (ACMNA155) • Connect fractions, decimals and percentages and carry out simple conversions (ACMNA157) • Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies. (ACMNA158)

© Australian Curriculum, Assessment and Reporting Authority 2012

This is an extract from the Australian Curriculum.

ACARA neither endorses nor verifies the accuracy of the information provided and accepts no responsibility for incomplete or inaccurate information. In particular, ACARA does not endorse or verify that:

- The content descriptions are solely for a particular year and subject;
- All the content descriptions for that year and subject have been used; and
- The author's material aligns with the Australian Curriculum content descriptions for the relevant year and subject.

You can find the unaltered and most up to date version of this material at <http://www.australiancurriculum.edu.au/>

This material is reproduced with the permission of ACARA.

Teaching Strategies

Teaching Strategies Fact Sheets

The Teaching Strategies Fact Sheets provide expert information for teachers about the recommended strategy-based approach to the teaching of arithmetic facts.

Extended Addition & Subtraction Number Facts

Teaching Strategies

Once students know all their basic addition and subtraction number facts, they are ready to learn the extended number facts.

Extended number facts are based on basic number facts, when they are applied to larger numbers.

Extended facts in this eBook include questions in which numbers made up of tens and zero ones are added or subtracted.

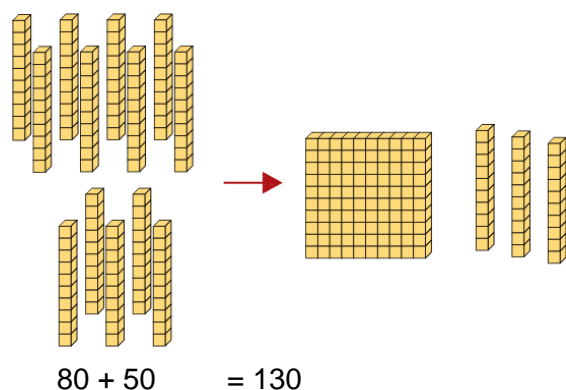
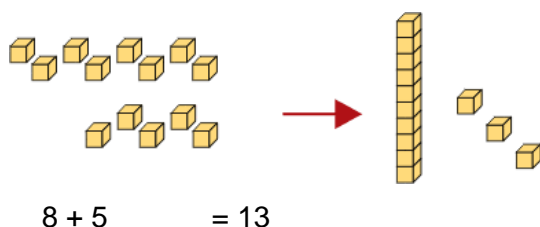
Adding Tens

Adding two numbers made up of tens is quite achievable for students who really know their basic addition facts. Base ten numbers behave in consistent ways, when numbers in a single place are manipulated.

For example, adding 3 and 4 results in a sum of 7, no matter if the amounts are made up of ones, tens, or another place:

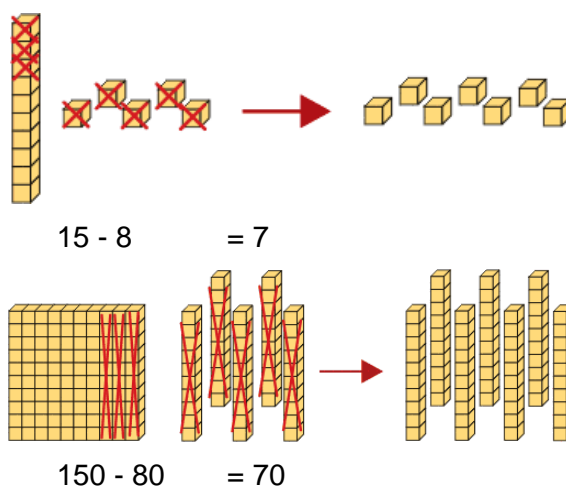
$$\begin{array}{rcl} 3 + 4 & = & 7 \\ 30 + 40 & = & 70 \end{array}$$

Students can model questions of adding tens in similar ways to adding single digits, if they substitute tens material for the numbers in place of ones material. For example:



Subtracting Tens

Similarly, subtraction of tens results in answers the same as the related basic subtraction facts, except they are in tens. For example:



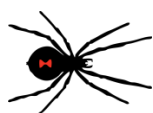
Multiplication Number Facts - Teaching Strategies

2x: 'Doubles'

The two times facts can be learned by thinking of doubles, which were previously learned as addition facts. For example:

$$\begin{aligned} 2 \times 3 &= \text{double } 3 \\ &= 3 + 3 \\ &= 6 \end{aligned}$$

We have been discussing everyday examples of doubles the children encounter, such as the digits on both hands (double 5), the legs on a spider (double 4), and so on. Encourage your child to think of examples like these when he or she is stuck.



$$2 \times 4 \text{ legs} = 8 \text{ legs}$$



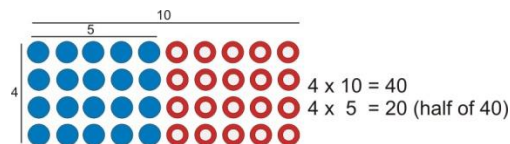
$$2 \times 3 \text{ legs} = 6 \text{ legs}$$

10x & 5x: 'Place Value', 'Halving'

The ten times facts relate closely to the names for groups of ten: twenty, thirty, forty, and so on. Children should not find these difficult.

Five times facts are easier than most other sets, due to the fact that 5 is half of 10. Even multiples of five are the same as half the number of tens. For example:

$$\begin{aligned} 5 \times 6 &= 10 \times \text{half of } 6 \\ &= 10 \times 3 \\ &= 30 \end{aligned}$$



Odd multiples of five always end in "5", and are five more than the previous multiple. For example:

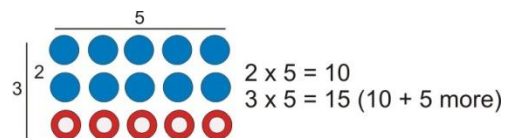
$$\begin{aligned} 5 \times 7 &= 6 \text{ fives} + 5 \\ &= 35 \end{aligned}$$

3x: 'Double Plus One More Set'

The three times facts may be recalled by thinking of the related doubles fact, and adding one more of the multiplier. For example:

$$\begin{aligned} 3 \times 7 &= \text{double } 7 + 7 \text{ more} \\ &= 14 + 7 \\ &= 21 \end{aligned}$$

Children may have to think hard to add some of the larger numbers. Always encourage the child to commit each fact to memory, which ultimately removes the need to use the strategy.

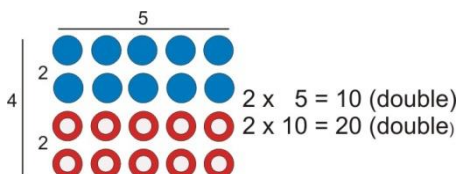


4x: 'Double Double'

The four times facts may be found by doubling the multiplier twice. For example:

$$\begin{aligned} 4 \times 6 &= \text{double } 6 \\ &= 12 \\ \text{double } 12 &= 24 \end{aligned}$$

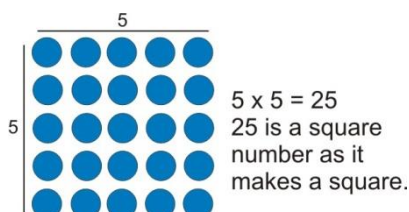
Children may have to think hard to double some of the larger numbers. Always encourage the child to commit each fact to memory, which ultimately removes the need to use the strategy.



0x & Square Numbers: Special Cases

These number facts are all somewhat unusual, which are combined in this sheet as special cases. Zero is the only number which when used as a multiplier results in a single result, zero. Talk to your child about what it means to have multiple empty containers: for example, 0×3 – “How many apples are in three empty boxes?”.

Square numbers are a very useful set to know, and should be learned as a special group. Each one may be thought of using a unique visual or mental model, such as the squares on a chess board for 8 squared



9x: ‘Think of Ten Less One Set’

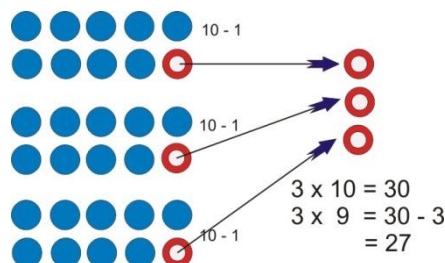
The nine times facts can be related to multiples of ten, with one of the multipliers removed. Since $9 = 10 - 1$, if it is multiplied, it is equal to the same number of tens, less the multiplier. For example:

$$\begin{aligned} 9 \times 7 &= 7 \text{ tens} - 7 \\ &= 70 - 7 \\ &= 63 \end{aligned}$$

Other patterns can be found in the nines facts, such as the patterns in the numbers of tens and ones and a special “finger trick” which students may know.

Yet another pattern in the nines is that the two digits always add up to 9. Coupled with the knowledge that the number of tens is one less than the multiplier, this strategy can be used:

$$\begin{aligned} 9 \times 3 &= [\text{one less than 3 tens}] + \text{ones} \\ &= 20 + [9 - 2 \text{ ones}] \\ &= 20 + 7 \\ &= 27 \end{aligned}$$

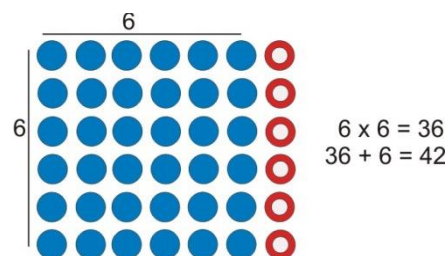
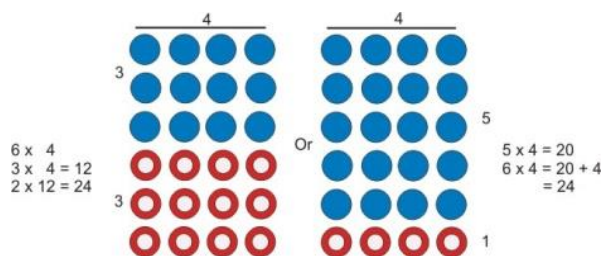


6x: ‘Double 3x’ or ‘Build From Five’

The six times facts can be linked to multiples of five, with an extra multiple added. For example:

$$\begin{aligned} 6 \times 7 &= 5 \times 7 \text{ plus } 7 \\ &= 35 + 7 \\ &= 42 \end{aligned}$$

Alternatively these facts can be thought of as double 3x facts. Note that by this stage, the child should have already memorised most of the six times facts, when learning other sets of facts. The only remaining “new” facts should be 6×7 and 6×8 .



8x: 'Double Double Double'

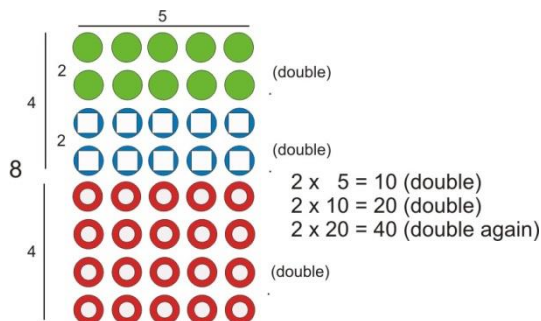
The eight times facts may be found by doubling the multiplicand three times. For example, " 7×8 ":

$$\text{double } 7 = 14$$

$$\text{double } 14 = 28$$

$$\text{double } 28 = 56$$

Note that by this stage, the child should have already memorised most of the eight times facts, when learning other sets of facts. The only remaining "new" fact should be 8×7 .



7x" 'Build From Known Facts'

The seven times facts are probably the most difficult facts to learn, and may be learned best by building from other known facts. For example:

$$6 \times 7 = 6 \times 6 + 6 \text{ more}$$

$$= 42$$

Note that all $7 \times$ facts will have been covered in other sets by this stage.

Division Number Facts - Teaching Strategies

$\div 2$ - "Halving" Strategy

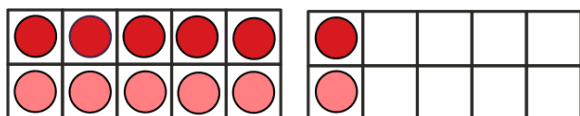
The divide by two number facts can be learned by thinking of halving. These facts were previously learned as subtraction facts and are the inverses of multiplication "doubles". For example:

$$18 \div 2 = \text{half of } 18 \\ = 9$$

Discuss everyday examples of doubles and halves with which the children are familiar, such as the eggs in an egg carton (12 eggs in two halves).

Using two ten frames can also help students to perceive the number that is half of an even number. For example:

$$12 \div 2 = \text{half of } 12 \\ = 6$$



$\div 10$ & $\div 5$ - "Place Value" Strategies

The divide by ten number facts rely on the student recalling which single digit number is matched with the ten name, such as "fifty" being linked to "five". Children should not find these difficult.

Divide by five number facts are easier than most other sets, due to the fact that 5 is half of 10. Dividing a multiple of ten by five is

the same as doubling the number of tens.

For example:

$$40 \div 5 = \text{double } 4 \\ = 8$$

Dividing by five a number ending in "5" will always result in an odd number. For example:

$$35 \div 5 = 7$$

$\div 3$ - "Relate to $\times 3$ " Strategy

The divide by three number facts are the first set for which there isn't an obvious



strategy. Whereas when multiplying there is often a way to think of multiples which is

helpful in speeding up the memorization process, division facts often have no special strategy, and so the general strategy of "think of the multiplication fact" is used.

Students should recall multiplication facts for the $3x$ facts, and "turn them around" to deduce the associated division facts.

For example, $21 \div 3 ::$ think of the fact " $3 \times \underline{\quad} = 21$ ". Since $3 \times 7 = 21$, the answer is "7".

$\div 4x$ - "Half and Half Again" Strategy

The divide by four number facts may be handled in the opposite way to the four times facts. Four times facts are learned by

doubling twice; if a multiple of 4 is halved twice, the result is the other factor. For example:

$$\begin{aligned} 24 \div 4 &= \text{half of (half of 24)} \\ &= \text{half of 12} \\ &= 6. \end{aligned}$$

0 ÷ & Squares – Special Cases

It is important for students to learn that it is impossible to divide any number by zero, and so this is not a divisor. On the other hand, dividing zero by another number is a special case, the result always being “0”. Talk to students about having an empty set of objects to share.

For example, “If I have no toys to share, how many can I give to each of three friends?”

Square numbers were learned as a set of special multiplication facts that are useful to know. Turning them around, square roots are the related special set of division facts.

÷ 9 – “Finger Trick” Strategy

The “finger trick” used to learn nine times facts is also useful for division facts. Students can be taught this trick: put both hands up in front, with thumbs adjacent. Bend one finger so that the other fingers to the left and right of that finger represent the number of tens and ones respectively. The position of the bent finger, counted from the left, is the



result of dividing the number by 9.

For example, put the fingers up, drop the right thumb to show five fingers, the dropped thumb then four fingers to represent the number “54”. The thumb is in the sixth position, showing that $54 \div 9 = 6$.

÷ 6 – “Relate to x6” Strategy

Students should recall multiplication facts for the 6x facts, and “turn them around” to deduce the associated division facts.

For example, $48 \div 6 ::$ think of the fact “ $6 \times \underline{\quad} = 48$ ”. Since $6 \times 8 = 48$, the answer is “8”.

Note that by this stage, the child should have already memorised most of the six division facts, when learning other sets of facts. The only remaining “new” facts should be $42 \div 6$ and $48 \div 6$.

÷ 7 – “Relate to x7” Strategy

Students should recall multiplication facts for the 7x facts, and “turn them around” to deduce the associated division facts.

For example, $42 \div 7 ::$ think of the fact “ $7 \times \underline{\quad} = 42$ ”. Since $6 \times 7 = 42$, the answer is “6”.

Note that by this stage, the child should have already memorised most of the seven division facts, when learning other sets of facts. The only remaining “new” fact should be $56 \div 7$.

$\div 8$ – “Relate to $\times 8$ ” Strategy

Students should recall multiplication facts for the $8\times$ facts, and “turn them around” to deduce the associated division facts.

For example, $56 \div 8 \therefore$ think of the fact “ $8 \times _ = 56$ ”. Since $7 \times 8 = 56$, the answer is “7”.

The eight times facts may also be found by halving the dividend three times. For example:

$$\begin{aligned} 40 \div 8 &= \text{half of (half of (half of 40))} \\ &= \text{half of (half of 20)} \\ &= \text{half of 10} \\ &= 5. \end{aligned}$$

Note that all eight division facts will have been covered in other sets by this stage.



Extended Multiplication & Division Number Facts

Teaching Strategies

Once students know all their basic multiplication and division number facts, they are ready to learn the extended number facts.

Extended number facts are based on basic number facts, when they are applied to larger or smaller numbers.

Extended facts include a limitless number of facts that can be derived from the basic facts. Students should be taught specific types of extended number facts, and also encouraged to discover other derived facts.

Multiples of Powers of Ten

Since our numbers are base ten numbers, multiplying either number in a multiplication operation results in a very predictable product, which differs from the related basic fact by a power of ten.

For example:

$$\begin{aligned} 4 \times 7 &= 28 \\ 40 \times 7 &= 280 \\ 400 \times 70 &= 28\,000 \end{aligned}$$

Introduce these extended facts first by changing one of the terms in a basic number fact, leaving the other number as a single digit number.

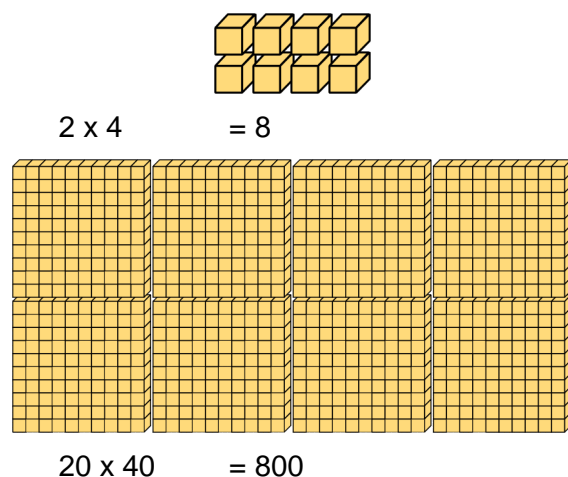
Note: Avoid talking of “adding zeros” to a result. Not only is this not an accurate description of the process, it does not apply when the result is a decimal fraction.

Students should be encouraged to see that multiplying powers of ten results in specific products relating to the original terms. These “power of ten products” can be applied to a basic fact to find the extended fact product.

For example:

$$10 \times 100 = 1000$$

With care these facts can be modelled with base ten material, and connections between basic facts and extended facts shown using arrays. For example:



Principles such as “tens times hundreds equals thousands” can be applied to a basic fact such as

$$2 \times 6 = 12$$

like so:

$$\begin{aligned} 20 \times 600 &= 12\,000 \\ 200 \times 60 &= 12\,000 \end{aligned}$$

and so on.

Multiples of Decimal Fractions

Decimal fractions such as 0.1, 0.01, and so on are also powers of ten, and so behave in similar ways, except that the resulting product will be smaller than the related basic fact.

For example:

$$9 \times 4 = 36$$

$$9 \times 0.4 = 3.6$$

$$0.9 \times 0.004 = 0.0036$$

As with larger powers of ten, start by changing one of the two terms in a basic fact, before making both terms decimal fractions.

Many adults learned to multiply decimal fractions by “moving the decimal point”. This is not recommended, since like “adding zeros” it does not express what is happening mathematically, and does not work for certain examples.

Students should learn that multiplying “unit” decimal fractions results in predictable results, such as the following:

$$1 \text{ tenth} \times 1 \text{ tenth} = 1 \text{ hundredth}$$

$$0.1 \times 0.1 = 0.01$$

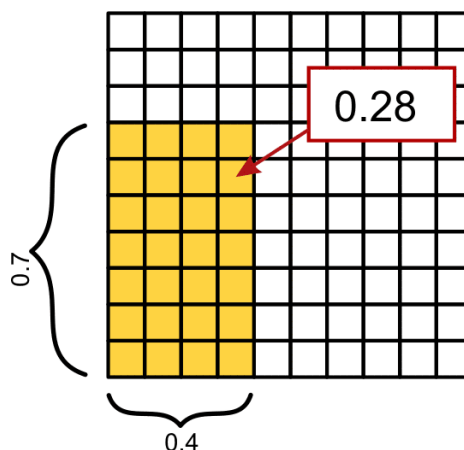
$$1 \text{ tenth} \times 1 \text{ hundredth} = 1 \text{ thousandth}$$

$$0.1 \times 0.01 = 0.001$$

The knowledge that the product of one tenth and one tenth is one hundredth can then be applied to an operation such as:

$$0.4 \times 0.7 = 0.28$$

This can also be modelled using a square hundred grid:



After students have developed familiarity with multiples of decimal fractions, they can be taught the rule of “counting the decimal places” to correctly place the decimal point in the answer. For example, in the question

$$0.003 \times 0.006 =$$

the student can count six digits after decimal points in the two factors, leading to the correct answer “18 with 6 decimal places”:

$$0.003 \times 0.006 = 0.000\ 018$$

Multiples of Unit Common Fractions

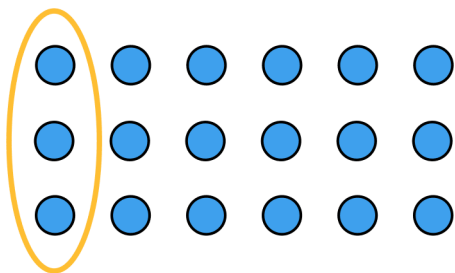
When a unit fraction (one in which the numerator is “1”) is multiplied, it behaves exactly the same as the denominator of the fraction applied as a divisor. For example:

$$\frac{1}{8} \times 32 = 4$$

is the same as

$$32 \div 8 = 4$$

Students can use physical models to see what a “fraction of a group” means. For example:



$$\frac{1}{6} \times 18 = 3$$

Fractions can also be multiplied by a related number raised by a power of ten. For example:

$$\frac{1}{9} \times 5400 = 600$$

Division of Powers of Ten

Using a “basic product” raised by a power of ten as the dividend leads to questions that are the inverse of the product of powers of ten. For example:

$$800 \times 2 = 1600$$

$$1600 \div 2 = 800$$

Other extended basic division facts can be derived, such as:

$$40\,000 \div 5 = 8000$$

$$4900 \div 70 = 70$$

Division of Decimal Fractions

Dividing a decimal fraction by a whole number is not difficult if the student first names the decimal fraction in terms of its last place. This can then be related to the relevant basic fact. For example:

$$36 \div 9 = 4$$

$$36 \text{ thousandths} \div 9 = 4 \text{ thousandths}$$

$$0.036 \div 9 = 0.004$$

Division by Decimal Fractions

Dividing by a decimal fraction is conceptually difficult, and should be understood via a “quotition” model, in which division is understood as *repeated subtraction* of the divisor. Thus, a question such as

$$3.5 \div 0.5 = 7$$

can be thought of as “How many times can 7 tenths be subtracted from 35 tenths?”

An alternative way to approach division by a decimal fraction is to write the question as a common fraction, then multiply by a power of ten to find an equivalent fraction that is a whole number. For example:

$$0.27 \div 0.003 =$$

can be written as

$$\frac{0.27}{0.003} = \frac{270}{3} = 90$$

Teaching Mental Strategies

Knowing basic number facts well is the foundation to lots of other mathematics. One set of skills which students can build onto their knowledge of the four operations' basic facts is mental strategies.

This eBook contains exercises on a variety of useful mental strategies which, if students develop them well, will allow for further development in the future.

Exercises in this eBook depend on prior experience and effective memorization of basic facts.

Multiplying by Powers of Ten

Multiplying by 10, 100 or 1000 is a very useful skill. Because regular numbers are based on 10, this is a simple mental process. Teach students to move every digit to the left by the appropriate number of places.

For example, $\times 100$: move every digit 2 places to the left, then fill in trailing zeros as place holders if necessary.

$$64 \times 100 = 6400$$

$$15.8 \times 1000 = 15\,800$$

Note: it is not recommended to talk of “adding zeroes”, since this is not an accurate description of the process. It also ceases to work if the number being multiplied has a decimal point. Rather, help students to see that when a number is multiplied by a power of ten, the digits are

shifted the appropriate number of places to the left. If required, zeroes are placed in right-hand places.

Dividing by Powers of Ten

Dividing by 10, 100, or 1000 is likewise a powerful and very useful skill. Once they understand the process, students should be able to complete these questions mentally. Teach them to move the digits one, two or three places to the right, noting where the decimal point is.

For example, $\div 100$: move the digits two places to the right.

$$25 \div 100 = 0.25$$

$$73.6 \div 10 = 7.36$$

Note: it is not recommended to talk of “moving the decimal point”, since this is not an accurate description of the process. Rather, discuss moving the digits to new locations, keeping the decimal point fixed between the ones and tenths places.

Doubling

Many mathematical processes involve some use of doubling; for example, when calculating an equivalent fraction, doubling a numerator and denominator is often required.

Teach students to look at the number being doubled and work out if regrouping is

required, then hold the various digits in memory before combining them in the result. If there is regrouping of ones, they should start by doubling the ones digit. For example:

Double 46: notice that double 6 goes over ten, so there will be an extra ten in the answer.

$$\begin{aligned}\text{Double 46} &= \text{double 4 tens} + \text{double 6 ones} \\ &= 8 \text{ tens} + 12 \text{ ones} \\ &= 92\end{aligned}$$

Halving

Being able to halve a number is often useful, for example when simplifying common fractions. Questions in this section start with simple examples without regrouping. Teach students to start with the left-hand place, noting when halving an odd number that an extra ten needs to be added to the next place to the right.

For example:

$$\begin{aligned}\text{Half of 76} &= \text{half of 6 tens} + \text{half of 16 ones} \\ &= 3 \text{ tens} + 8 \text{ ones} \\ &= 38\end{aligned}$$

Adding “Nice” Numbers

When mentally adding a set of numbers, proficient thinkers will look for numbers which add easily together. These pairs will usually be two numbers whose sum is 10 or 100.

For example:

$$\begin{aligned}7 + 6 + 1 + 4 + 3 &= 7 + 3 + 6 + 4 + 1 \\ &= 10 + 10 + 1 \\ &= 21\end{aligned}$$

Adding Near 100

When adding numbers near 100, a “compensation” method can often be used.

For example:

$$\begin{aligned}98 + 43 &= 100 + 43 - 2 \\ &= 143 - 2 \\ &= 141\end{aligned}$$

Students can think of strategies that they find easy, such as adding 100 then subtracting 2, or subtracting 2 from the second number and then adding 100. Similarly, when adding a number a little bigger than 100 or another round number, we can compensate by adding the “extra”.

For example:

$$\begin{aligned}82 + 101 &= 82 + 100 + 1 \\ &= 182 + 1 \\ &= 183\end{aligned}$$

Subtracting Near 100

Just as when adding near 100, with these questions students should think about subtracting 100, and compensating for the difference.

For example:

$$\begin{aligned}374 - 99 &= 372 - 100 + 1 \\ &= 274 + 1 \\ &= 275\end{aligned}$$

Multiplying by 50 & 25

Multiplying by 50 and 25 is quite easy to do, seeing that they are one half and one fourth or quarter of 100, respectively.

Multiplying by 50 can be done by multiplying by 100 then halving the result, or in the opposite order, halve the other number first, then multiply by 100. Similarly, multiplying by 25 involves quartering and multiplying by 100.

For example:

$$\begin{aligned} 64 \times 25 &= 64 \div 4 \times 25 \times 4 \\ &= 16 \times 100 \\ &= 1600 \end{aligned}$$

Extended Multiplication & Division with Decimals

Operations carried out on decimal fractions behave in exactly the same way as with whole numbers, except that the values are in a different place.

For example:

$$\begin{aligned} 6 \times 8 &= 48; \\ 6 \text{ tenths} \times 8 &= 48 \text{ tenths} \\ &= 4.8 \end{aligned}$$

Students should be familiar with their basic number facts, and have a good understanding of tenths and hundredths before commencing these questions.

Check Up Tests Markbook

There are 4 or 5 Check Up Tests in this eBook. Enter students' scores and times below to keep track of their progress.

[illegible]

[illegible]

Standard Worksheets

Standard Worksheets

Standard Worksheets are designed for use by the majority of students in a regular class.

Suggested Uses:

1. Use one worksheet per day for four days a week, followed by a Check-Up sheet on the tenth day, once per two weeks. This program will take 10 weeks in total, after which the majority of students should know the arithmetic facts they have been practising.
2. Use a Checkup sheet to discover your students' strengths and weaknesses. Use a targeted approach to customize each student's program, providing each student with a selection of Standard Worksheets which match that student's needs.

Note: **Answer keys** for all worksheets are in the Answer Keys Section of this eBook.

Time:

Score:

Multiplying by 10, 100 or 1,000: 1 [A]


**PROFESSOR PETE'S
CLASSROOM**

x 10, 100, 1000

÷ 10, 100, 1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

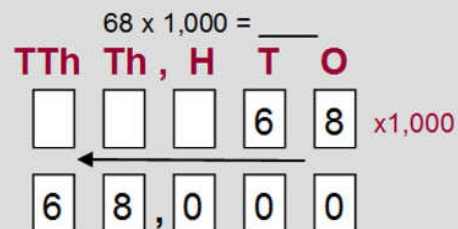
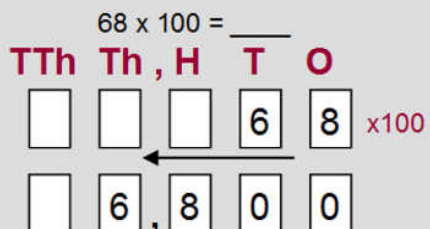
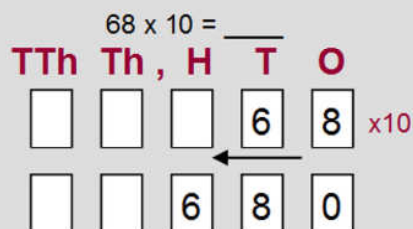
x5

x 50, 25

Revision

To x10, x100, x1,000: Use a number slide.

- x10 move the numbers **1 place**. The number is getting bigger, so move each digit to the **left**.
- x100 move the numbers **2 places** to the left.
- x1,000 move the numbers **3 places** to the left.



Note to teachers: It is not recommended to talk of “adding zeroes”, since this is not an accurate description of the process. Also it causes problems when numbers with decimals are multiplied. Rather, talk about moving the digits to new locations to make the number bigger by a power of ten.

x 10, x 100, x 1,000

- 1) $66 \times 10 =$ _____
- 2) $24 \times 100 =$ _____
- 3) $47 \times 1,000 =$ _____
- 4) $45 \times 100 =$ _____
- 5) $48 \times 100 =$ _____
- 6) $56 \times 10 =$ _____
- 7) $32 \times 100 =$ _____
- 8) $91 \times 1,000 =$ _____
- 9) $15 \times 10 =$ _____
- 10) $45 \times 1,000 =$ _____

- 11) $1 \times 1,000 =$ _____
- 12) $98 \times 100 =$ _____
- 13) $85 \times 10 =$ _____
- 14) $25 \times 1,000 =$ _____
- 15) $26 \times 10 =$ _____
- 16) $84 \times 100 =$ _____
- 17) $51 \times 1,000 =$ _____
- 18) $37 \times 100 =$ _____
- 19) $45 \times 10 =$ _____
- 20) $81 \times 1,000 =$ _____

Addition revision

- 21) $6 + 5 =$ _____
- 22) $9 + 8 =$ _____
- 23) $4 + 6 =$ _____
- 24) $5 + 8 =$ _____
- 25) $7 + 4 =$ _____
- 26) $9 + 4 =$ _____
- 27) $5 + 5 =$ _____
- 28) $4 + 5 =$ _____
- 29) $3 + 5 =$ _____
- 30) $10 + 7 =$ _____

Subtraction revision

- 31) $10 - 5 =$ _____
- 32) $9 - 4 =$ _____
- 33) $17 - 9 =$ _____
- 34) $14 - 6 =$ _____
- 35) $9 - 2 =$ _____
- 36) $12 - 4 =$ _____
- 37) $17 - 8 =$ _____
- 38) $11 - 3 =$ _____
- 39) $16 - 8 =$ _____
- 40) $18 - 9 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook “Ten Minutes Day 3: Mental Strategies Worksheets”.

Time:

Score:

Multiplying by 10, 100 or 1,000: 1 [B]

PROFESSOR PETE'S
CLASSROOM

x 10, 100, 1000

÷ 10, 100, 1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

- Nr 100

x5

x 50, 25

Revision

To x10, x100, x1,000: Use a number slide.

- x10 move the numbers 1 place. The number is getting bigger, so move each digit to the left.
- x100 move the numbers 2 places to the left.
- x1,000 move the numbers 3 places to the left.

$47.3 \times 10 = \underline{\quad}$

$47.3 \times 100 = \underline{\quad}$

$47.3 \times 1,000 = \underline{\quad}$

TTh Th, H T O . t

TTh Th, H T O . t

TTh Th, H T O . t

			4	3	.	7	x10				4	3	.	7	x100				4	3	.	7	x1,000			
			4	3	7	.					4	3	7	0	.					4	3	7	0	0	.	

x 10, x 100, x 1,000

- | | |
|--------------------------------|---------------------------------|
| 1) $78.9 \times 100 =$ _____ | 11) $94.6 \times 100 =$ _____ |
| 2) $942 \times 10 =$ _____ | 12) $908 \times 100 =$ _____ |
| 3) $80.4 \times 10 =$ _____ | 13) $87.1 \times 100 =$ _____ |
| 4) $50.4 \times 100 =$ _____ | 14) $50.5 \times 10 =$ _____ |
| 5) $78.5 \times 10 =$ _____ | 15) $570 \times 1,000 =$ _____ |
| 6) $80.2 \times 10 =$ _____ | 16) $38 \times 1,000 =$ _____ |
| 7) $997 \times 100 =$ _____ | 17) $12.1 \times 100 =$ _____ |
| 8) $83.1 \times 1,000 =$ _____ | 18) $31.0 \times 1,000 =$ _____ |
| 9) $72.0 \times 100 =$ _____ | 19) $95 \times 1,000 =$ _____ |
| 10) $2.9 \times 10 =$ _____ | 20) $356 \times 100 =$ _____ |

Addition revision

- | | |
|---------------------|----------------------|
| 21) $5 + 7 =$ _____ | 24) $5 + 4 =$ _____ |
| 22) $5 + 5 =$ _____ | 25) $8 + 4 =$ _____ |
| 23) $7 + 4 =$ _____ | 26) $10 + 7 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 33) $11 - 4 =$ _____ | 36) $10 - 4 =$ _____ |
| 34) $18 - 9 =$ _____ | 37) $9 - 3 =$ _____ |
| 35) $16 - 7 =$ _____ | 38) $12 - 6 =$ _____ |

Multiplication revision

- | | |
|---------------------------|--------------------------|
| 27) $8 \times 9 =$ _____ | 30) $5 \times 8 =$ _____ |
| 28) $10 \times 5 =$ _____ | 31) $5 \times 7 =$ _____ |
| 29) $9 \times 7 =$ _____ | 32) $4 \times 7 =$ _____ |

Division revision

- | | |
|-------------------------|-------------------------|
| 39) $36 \div 4 =$ _____ | 42) $36 \div 6 =$ _____ |
| 40) $48 \div 6 =$ _____ | 43) $54 \div 6 =$ _____ |
| 41) $72 \div 9 =$ _____ | 44) $72 \div 8 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying by 10, 100 or 1,000: 1 [C]



x 10, 100, 1000

÷ 10, 100, 1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

x5

x 50, 25

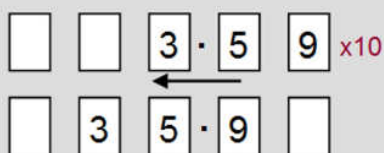
Revision

To x10, x100, x1,000: Use a number slide.

- x10 move the numbers **1 place**. The number is getting bigger, so move each digit to the **left**.
- x100 move the numbers **2 places** to the left.
- x1,000 move the numbers **3 places** to the left.

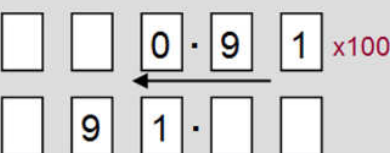
$3.59 \times 10 = \underline{\quad}$

H T O . t h



$3.59 \times 100 = \underline{\quad}$

H T O . t h



$3.59 \times 1,000 = \underline{\quad}$

H T O . t h th

**x 10, x 100, x 1,000**

- | | |
|---|--|
| 1) $9.49 \times 100 = \underline{\quad}$ | 11) $49.3 \times 10 = \underline{\quad}$ |
| 2) $2.66 \times 10 = \underline{\quad}$ | 12) $0.338 \times 100 = \underline{\quad}$ |
| 3) $60.8 \times 1,000 = \underline{\quad}$ | 13) $635 \times 1,000 = \underline{\quad}$ |
| 4) $77.6 \times 100 = \underline{\quad}$ | 14) $7.254 \times 1,000 = \underline{\quad}$ |
| 5) $9.22 \times 100 = \underline{\quad}$ | 15) $4.44 \times 1,000 = \underline{\quad}$ |
| 6) $521 \times 10 = \underline{\quad}$ | 16) $36.6 \times 10 = \underline{\quad}$ |
| 7) $951 \times 100 = \underline{\quad}$ | 17) $2.97 \times 100 = \underline{\quad}$ |
| 8) $6.17 \times 1,000 = \underline{\quad}$ | 18) $395 \times 1,000 = \underline{\quad}$ |
| 9) $275 \times 10 = \underline{\quad}$ | 19) $3.75 \times 100 = \underline{\quad}$ |
| 10) $37.8 \times 1,000 = \underline{\quad}$ | 20) $746 \times 100 = \underline{\quad}$ |

Addition revision

- | | |
|---------------------------------|---------------------------------|
| 21) $5 + 5 = \underline{\quad}$ | 24) $6 + 5 = \underline{\quad}$ |
| 22) $9 + 5 = \underline{\quad}$ | 25) $5 + 6 = \underline{\quad}$ |
| 23) $3 + 6 = \underline{\quad}$ | 26) $4 + 5 = \underline{\quad}$ |

Subtraction revision

- | | |
|----------------------------------|----------------------------------|
| 33) $16 - 8 = \underline{\quad}$ | 36) $18 - 9 = \underline{\quad}$ |
| 34) $14 - 6 = \underline{\quad}$ | 37) $17 - 9 = \underline{\quad}$ |
| 35) $16 - 7 = \underline{\quad}$ | 38) $9 - 2 = \underline{\quad}$ |

Multiplication revision

- | | |
|--------------------------------------|---------------------------------------|
| 27) $4 \times 7 = \underline{\quad}$ | 30) $7 \times 8 = \underline{\quad}$ |
| 28) $4 \times 5 = \underline{\quad}$ | 31) $7 \times 7 = \underline{\quad}$ |
| 29) $6 \times 4 = \underline{\quad}$ | 32) $10 \times 5 = \underline{\quad}$ |

Division revision

- | | |
|-------------------------------------|-------------------------------------|
| 39) $28 \div 7 = \underline{\quad}$ | 42) $36 \div 9 = \underline{\quad}$ |
| 40) $40 \div 5 = \underline{\quad}$ | 43) $81 \div 9 = \underline{\quad}$ |
| 41) $30 \div 3 = \underline{\quad}$ | 44) $54 \div 9 = \underline{\quad}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying by 10, 100 or 1,000: 1 [D]



x 10,100,1000

÷10,100,1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

x5

x 50,25

Revision

x 10, x 100, x 1,000

1) $422 \times 10 =$ _____

2) $48.3 \times 100 =$ _____

3) $561 \times 10 =$ _____

4) $7.24 \times 10 =$ _____

5) $46.3 \times 10 =$ _____

6) $4.41 \times 1,000 =$ _____

7) $59.2 \times 1,000 =$ _____

8) $6 \times 1,000 =$ _____

9) $91.0 \times 10 =$ _____

10) $2.37 \times 1,000 =$ _____

11) $669 \times 10 =$ _____

12) $7.82 \times 10 =$ _____

13) $0.573 \times 10 =$ _____

14) $612 \times 1,000 =$ _____

15) $564 \times 100 =$ _____

16) $29.29 \times 100 =$ _____

17) $261 \times 10 =$ _____

18) $58.1 \times 100 =$ _____

19) $887 \times 1,000 =$ _____

20) $88.3 \times 10 =$ _____

21) $9.04 \times 10 =$ _____

22) $76.6 \times 1,000 =$ _____

23) $0.803 \times 100 =$ _____

24) $0.17 \times 100 =$ _____

Addition revision

25) $10 + 7 =$ _____

30) $9 + 7 =$ _____

26) $9 + 4 =$ _____

31) $8 + 8 =$ _____

27) $6 + 9 =$ _____

32) $10 + 4 =$ _____

28) $9 + 6 =$ _____

33) $5 + 5 =$ _____

29) $7 + 5 =$ _____

34) $9 + 9 =$ _____

Subtraction revision

45) $16 - 8 =$ _____

50) $11 - 2 =$ _____

46) $16 - 9 =$ _____

51) $14 - 5 =$ _____

47) $17 - 8 =$ _____

52) $14 - 8 =$ _____

48) $13 - 8 =$ _____

53) $9 - 2 =$ _____

49) $13 - 7 =$ _____

54) $11 - 5 =$ _____

Multiplication revision

35) $7 \times 4 =$ _____

40) $8 \times 8 =$ _____

36) $8 \times 9 =$ _____

41) $4 \times 6 =$ _____

37) $9 \times 9 =$ _____

42) $6 \times 6 =$ _____

38) $10 \times 7 =$ _____

43) $9 \times 8 =$ _____

39) $5 \times 8 =$ _____

44) $5 \times 6 =$ _____

Division revision

55) $30 \div 6 =$ _____

60) $54 \div 6 =$ _____

56) $40 \div 8 =$ _____

61) $42 \div 7 =$ _____

57) $72 \div 8 =$ _____

62) $72 \div 9 =$ _____

58) $32 \div 4 =$ _____

63) $24 \div 3 =$ _____

59) $30 \div 5 =$ _____

64) $35 \div 7 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

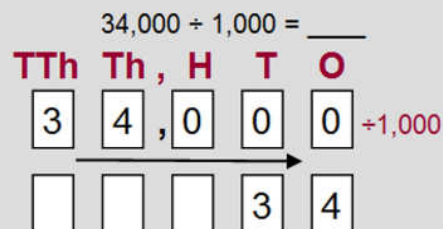
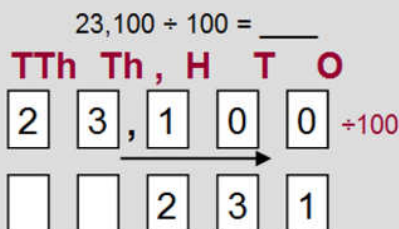
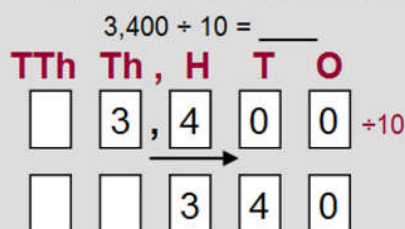
Dividing by 10, 100 or 1,000: 2 [A]



x 10, 100, 1000	Doubling Lg	Nice Numbers	– Nr 100	x 50, 25
÷ 10, 100, 1000	Halving Lg	+ Nr 100	x 5	Revision

To ÷10, ÷100, ÷1,000: Use the number slide.

- ÷10 move the numbers 1 place. Which way? **Think!** The numbers need to get smaller! So which way?
- ÷100 move the numbers 2 places.
- ÷1,000 move the numbers 3 places.



Note to teachers: It is not recommended to talk of “removing zeroes”, since this is not an accurate description of the process. It also complicates the porces when dealing with decimals. Rather, talk about moving the digits to new locations toake the number smaller by a power of ten.

÷ 10, ÷ 100, ÷ 1000

- | | |
|---------------------------|----------------------------|
| 1) 8,900 ÷ 10 = _____ | 11) 8,790 ÷ 10 = _____ |
| 2) 3,700 ÷ 100 = _____ | 12) 64,000 ÷ 100 = _____ |
| 3) 4,740 ÷ 10 = _____ | 13) 59,800 ÷ 100 = _____ |
| 4) 46,000 ÷ 1,000 = _____ | 14) 31,000 ÷ 1,000 = _____ |
| 5) 6,200 ÷ 10 = _____ | 15) 68,130 ÷ 10 = _____ |
| 6) 2,500 ÷ 100 = _____ | 16) 4,000 ÷ 1,000 = _____ |
| 7) 7,000 ÷ 100 = _____ | 17) 10,000 ÷ 1,000 = _____ |
| 8) 6,100 ÷ 100 = _____ | 18) 35,600 ÷ 100 = _____ |
| 9) 80,000 ÷ 1,000 = _____ | 19) 69,030 ÷ 10 = _____ |
| 10) 780 ÷ 10 = _____ | 20) 84,000 ÷ 1,000 = _____ |

Multiplication revision

- | | |
|-------------------|--------------------|
| 21) 9 × 6 = _____ | 26) 5 × 5 = _____ |
| 22) 7 × 3 = _____ | 27) 10 × 3 = _____ |
| 23) 4 × 5 = _____ | 28) 4 × 8 = _____ |
| 24) 6 × 5 = _____ | 29) 4 × 2 = _____ |
| 25) 4 × 4 = _____ | 30) 4 × 6 = _____ |

Division revision

- | | |
|--------------------|--------------------|
| 31) 21 ÷ 3 = _____ | 36) 32 ÷ 8 = _____ |
| 32) 42 ÷ 6 = _____ | 37) 48 ÷ 8 = _____ |
| 33) 56 ÷ 7 = _____ | 38) 36 ÷ 4 = _____ |
| 34) 63 ÷ 9 = _____ | 39) 14 ÷ 2 = _____ |
| 35) 12 ÷ 2 = _____ | 40) 81 ÷ 9 = _____ |

This worksheet is part of the Professor Pete's Classroom eBook “Ten Minutes Day 3: Mental Strategies Worksheets”.

Time:

Score:

Dividing by 10, 100 or 1,000: 2 [B]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

To ÷10, ÷100, ÷1,000: Use the number slide.

- ÷10 move the numbers 1 place. Which way? Think! The numbers need to get smaller! So which way?
- ÷100 move the numbers 2 places.
- ÷1,000 move the numbers 3 places.

$3,605 \div 10 = \underline{\hspace{2cm}}$

$78,040 \div 100 = \underline{\hspace{2cm}}$

$47,600 \div 1,000 = \underline{\hspace{2cm}}$

TTh	Th, H	T	O	.	t	TTh	Th, H	T	O	.	t	TTh	Th, H	T	O	.	t														
	3	,	6		0	5	÷10		7	,	8	,	0		4		0	÷100		4	,	7	,	6		0		0	.	0	÷1,000
			3		6	0	.	5				7		8		0	.	4						4		7	.	6			

÷ 10, ÷ 100, ÷ 1000

- | | |
|---|--|
| 1) $42,944 \div 10 = \underline{\hspace{2cm}}$ | 11) $6 \div 10 = \underline{\hspace{2cm}}$ |
| 2) $2,590 \div 100 = \underline{\hspace{2cm}}$ | 12) $22,490 \div 100 = \underline{\hspace{2cm}}$ |
| 3) $74,240 \div 100 = \underline{\hspace{2cm}}$ | 13) $67,300 \div 1,000 = \underline{\hspace{2cm}}$ |
| 4) $18,200 \div 1,000 = \underline{\hspace{2cm}}$ | 14) $1,760 \div 100 = \underline{\hspace{2cm}}$ |
| 5) $65,900 \div 10 = \underline{\hspace{2cm}}$ | 15) $6,000 \div 10 = \underline{\hspace{2cm}}$ |
| 6) $70 \div 100 = \underline{\hspace{2cm}}$ | 16) $90,000 \div 1,000 = \underline{\hspace{2cm}}$ |
| 7) $7,010 \div 100 = \underline{\hspace{2cm}}$ | 17) $22,001 \div 10 = \underline{\hspace{2cm}}$ |
| 8) $3,770 \div 10 = \underline{\hspace{2cm}}$ | 18) $5,710 \div 1,000 = \underline{\hspace{2cm}}$ |
| 9) $92,200 \div 1,000 = \underline{\hspace{2cm}}$ | 19) $67,000 \div 1,000 = \underline{\hspace{2cm}}$ |
| 10) $13,212 \div 10 = \underline{\hspace{2cm}}$ | 20) $4 \div 1,000 = \underline{\hspace{2cm}}$ |

Addition revision

- | | |
|---|--|
| 21) $4 + 5 = \underline{\hspace{2cm}}$ | 24) $9 + 8 = \underline{\hspace{2cm}}$ |
| 22) $4 + 6 = \underline{\hspace{2cm}}$ | 25) $7 + 8 = \underline{\hspace{2cm}}$ |
| 23) $10 + 9 = \underline{\hspace{2cm}}$ | 26) $4 + 7 = \underline{\hspace{2cm}}$ |

Subtraction revision

- | | |
|---|---|
| 33) $13 - 4 = \underline{\hspace{2cm}}$ | 36) $18 - 9 = \underline{\hspace{2cm}}$ |
| 34) $12 - 4 = \underline{\hspace{2cm}}$ | 37) $13 - 7 = \underline{\hspace{2cm}}$ |
| 35) $17 - 9 = \underline{\hspace{2cm}}$ | 38) $13 - 5 = \underline{\hspace{2cm}}$ |

Multiplication revision

- | | |
|--|---|
| 27) $7 \times 8 = \underline{\hspace{2cm}}$ | 30) $6 \times 5 = \underline{\hspace{2cm}}$ |
| 28) $10 \times 5 = \underline{\hspace{2cm}}$ | 31) $7 \times 5 = \underline{\hspace{2cm}}$ |
| 29) $3 \times 6 = \underline{\hspace{2cm}}$ | 32) $5 \times 5 = \underline{\hspace{2cm}}$ |

Division revision

- | | |
|--|--|
| 39) $24 \div 8 = \underline{\hspace{2cm}}$ | 42) $18 \div 9 = \underline{\hspace{2cm}}$ |
| 40) $54 \div 9 = \underline{\hspace{2cm}}$ | 43) $40 \div 5 = \underline{\hspace{2cm}}$ |
| 41) $56 \div 8 = \underline{\hspace{2cm}}$ | 44) $35 \div 7 = \underline{\hspace{2cm}}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

Dividing by 10, 100 or 1,000: 2 [C]



x 10, 100, 1000	Doubling Lg	Nice Numbers	– Nr 100	x 50, 25
÷ 10, 100, 1000	Halving Lg	+ Nr 100	x5	Revision

To ÷10, ÷100, ÷1,000: Use the number slide.

- ÷10 move the numbers 1 place. Which way? **Think!** The numbers need to get smaller! So which way?
- ÷100 move the numbers 2 places.
- ÷1,000 move the numbers 3 places.

$460.2 \div 10 = \underline{\quad}$ H T O . t h <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px 5px;">4</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">.</div> <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> </div> <div style="text-align: center; margin: 0 10px;">→ ÷10</div> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px 5px;"> </div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> <div style="border: 1px solid black; padding: 2px 5px;">.</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">2</div> </div>	$570 \div 100 = \underline{\quad}$ H T O . t h <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px 5px;">5</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">.</div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> </div> <div style="text-align: center; margin: 0 10px;">→ ÷100</div> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px 5px;"> </div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> <div style="border: 1px solid black; padding: 2px 5px;">5</div> <div style="border: 1px solid black; padding: 2px 5px;">.</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> </div>	$841 \div 1,000 = \underline{\quad}$ H T O . t h th <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px 5px;">8</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> <div style="border: 1px solid black; padding: 2px 5px;">.</div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> </div> <div style="text-align: center; margin: 0 10px;">→ ÷1,000</div> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px 5px;"> </div> <div style="border: 1px solid black; padding: 2px 5px;"> </div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">.</div> <div style="border: 1px solid black; padding: 2px 5px;">8</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> </div>
---	---	--

÷ 10, ÷ 100, ÷ 1000

- | | |
|--|--|
| 1) $572 \div 10 = \underline{\quad}$ | 11) $7.01 \div 10 = \underline{\quad}$ |
| 2) $504 \div 1,000 = \underline{\quad}$ | 12) $604 \div 100 = \underline{\quad}$ |
| 3) $283 \div 100 = \underline{\quad}$ | 13) $488.9 \div 100 = \underline{\quad}$ |
| 4) $90.5 \div 10 = \underline{\quad}$ | 14) $805 \div 1,000 = \underline{\quad}$ |
| 5) $992 \div 100 = \underline{\quad}$ | 15) $940 \div 100 = \underline{\quad}$ |
| 6) $7 \div 100 = \underline{\quad}$ | 16) $456.6 \div 100 = \underline{\quad}$ |
| 7) $172 \div 1,000 = \underline{\quad}$ | 17) $7,917 \div 1,000 = \underline{\quad}$ |
| 8) $790 \div 10 = \underline{\quad}$ | 18) $56 \div 1,000 = \underline{\quad}$ |
| 9) $900 \div 1,000 = \underline{\quad}$ | 19) $490 \div 100 = \underline{\quad}$ |
| 10) $740 \div 1,000 = \underline{\quad}$ | 20) $8 \div 1,000 = \underline{\quad}$ |

Addition revision

- | | |
|---------------------------------|---------------------------------|
| 21) $8 + 9 = \underline{\quad}$ | 24) $3 + 4 = \underline{\quad}$ |
| 22) $8 + 8 = \underline{\quad}$ | 25) $9 + 7 = \underline{\quad}$ |
| 23) $5 + 4 = \underline{\quad}$ | 26) $2 + 8 = \underline{\quad}$ |

Subtraction revision

- | | |
|----------------------------------|----------------------------------|
| 33) $15 - 9 = \underline{\quad}$ | 36) $7 - 2 = \underline{\quad}$ |
| 34) $5 - 3 = \underline{\quad}$ | 37) $14 - 7 = \underline{\quad}$ |
| 35) $12 - 5 = \underline{\quad}$ | 38) $15 - 8 = \underline{\quad}$ |

Multiplication revision

- | | |
|--------------------------------------|--------------------------------------|
| 27) $2 \times 3 = \underline{\quad}$ | 30) $4 \times 5 = \underline{\quad}$ |
| 28) $9 \times 8 = \underline{\quad}$ | 31) $9 \times 7 = \underline{\quad}$ |
| 29) $9 \times 2 = \underline{\quad}$ | 32) $8 \times 3 = \underline{\quad}$ |

Division revision

- | | |
|-------------------------------------|-------------------------------------|
| 39) $72 \div 9 = \underline{\quad}$ | 42) $45 \div 5 = \underline{\quad}$ |
| 40) $42 \div 6 = \underline{\quad}$ | 43) $12 \div 2 = \underline{\quad}$ |
| 41) $16 \div 4 = \underline{\quad}$ | 44) $63 \div 7 = \underline{\quad}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

Dividing by 10, 100 or 1,000: 2 [D]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

÷ 10, ÷ 100, ÷ 1000

- | | |
|--------------------------------|--------------------------------|
| 1) $3,783 \div 10 =$ _____ | 13) $40,067 \div 10 =$ _____ |
| 2) $5,463 \div 100 =$ _____ | 14) $41 \div 1,000 =$ _____ |
| 3) $500 \div 1,000 =$ _____ | 15) $2 \div 100 =$ _____ |
| 4) $685.3 \div 100 =$ _____ | 16) $30,783 \div 100 =$ _____ |
| 5) $8,079 \div 100 =$ _____ | 17) $8,307.6 \div 100 =$ _____ |
| 6) $80 \div 1,000 =$ _____ | 18) $60 \div 100 =$ _____ |
| 7) $1 \div 1,000 =$ _____ | 19) $50,005 \div 100 =$ _____ |
| 8) $8,060 \div 10 =$ _____ | 20) $90,600 \div 100 =$ _____ |
| 9) $8.88 \div 10 =$ _____ | 21) $76,800 \div 100 =$ _____ |
| 10) $4,006 \div 1,000 =$ _____ | 22) $30,000 \div 10 =$ _____ |
| 11) $2,687 \div 10 =$ _____ | 23) $307 \div 1,000 =$ _____ |
| 12) $3,652 \div 100 =$ _____ | 24) $69,000 \div 100 =$ _____ |

Addition revision

- | | |
|---------------------|----------------------|
| 25) $7 + 8 =$ _____ | 30) $1 + 5 =$ _____ |
| 26) $3 + 9 =$ _____ | 31) $10 + 9 =$ _____ |
| 27) $8 + 7 =$ _____ | 32) $1 + 7 =$ _____ |
| 28) $8 + 8 =$ _____ | 33) $3 + 8 =$ _____ |
| 29) $4 + 7 =$ _____ | 34) $5 + 8 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 45) $17 - 9 =$ _____ | 50) $10 - 4 =$ _____ |
| 46) $11 - 8 =$ _____ | 51) $15 - 7 =$ _____ |
| 47) $5 - 2 =$ _____ | 52) $7 - 4 =$ _____ |
| 48) $7 - 5 =$ _____ | 53) $12 - 8 =$ _____ |
| 49) $12 - 5 =$ _____ | 54) $13 - 6 =$ _____ |

Multiplication revision

- | | |
|---------------------------|--------------------------|
| 35) $10 \times 3 =$ _____ | 40) $4 \times 4 =$ _____ |
| 36) $9 \times 2 =$ _____ | 41) $8 \times 2 =$ _____ |
| 37) $9 \times 5 =$ _____ | 42) $7 \times 9 =$ _____ |
| 38) $9 \times 4 =$ _____ | 43) $6 \times 3 =$ _____ |
| 39) $2 \times 2 =$ _____ | 44) $4 \times 2 =$ _____ |

Division revision

- | | |
|-------------------------|-------------------------|
| 55) $48 \div 6 =$ _____ | 60) $30 \div 3 =$ _____ |
| 56) $54 \div 6 =$ _____ | 61) $12 \div 6 =$ _____ |
| 57) $16 \div 8 =$ _____ | 62) $36 \div 9 =$ _____ |
| 58) $63 \div 7 =$ _____ | 63) $12 \div 3 =$ _____ |
| 59) $21 \div 7 =$ _____ | 64) $18 \div 9 =$ _____ |

Time:

Score:

Doubling 2-digit Numbers: 3 [A]


 x 10, 100, 1000
 ÷ 10, 100, 1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

– Nr 100

x5

 x 50, 25
 Revision
Doubling 2-digit numbers

Double both places, starting with the tens.

For example, Double 23: double the 2 (tens), double the 3: 4 tens + 6 = 46.

Doubling without regrouping

- | | | | |
|--------------------------|---------------------------|---------------------------|---------------------------|
| 1) $42 \times 2 =$ _____ | 6) $32 \times 2 =$ _____ | 11) $24 \times 2 =$ _____ | 16) $32 \times 2 =$ _____ |
| 2) $34 \times 2 =$ _____ | 7) $14 \times 2 =$ _____ | 12) $23 \times 2 =$ _____ | 17) $24 \times 2 =$ _____ |
| 3) $41 \times 2 =$ _____ | 8) $20 \times 2 =$ _____ | 13) $13 \times 2 =$ _____ | 18) $12 \times 2 =$ _____ |
| 4) $24 \times 2 =$ _____ | 9) $43 \times 2 =$ _____ | 14) $21 \times 2 =$ _____ | 19) $40 \times 2 =$ _____ |
| 5) $31 \times 2 =$ _____ | 10) $22 \times 2 =$ _____ | 15) $34 \times 2 =$ _____ | 20) $30 \times 2 =$ _____ |

Doubling 2-digit numbers with regrouping

Start by doubling the tens. For example, Double 46: double 4 = 8. Try to remember this number. If you need to, you can write the 8 very lightly until you have doubled the ones."

Now double the ones: double 6 = 12. Add the ten to the 8 tens, write "9" (if you wrote "8" softly, write over it with "9"). Then record the remaining ones, "2". Double 46 = 92.

Doubling with regrouping

- | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|
| 21) $17 \times 2 =$ _____ | 26) $24 \times 2 =$ _____ | 31) $16 \times 2 =$ _____ | 36) $21 \times 2 =$ _____ |
| 22) $39 \times 2 =$ _____ | 27) $38 \times 2 =$ _____ | 32) $10 \times 2 =$ _____ | 37) $17 \times 2 =$ _____ |
| 23) $26 \times 2 =$ _____ | 28) $12 \times 2 =$ _____ | 33) $20 \times 2 =$ _____ | 38) $13 \times 2 =$ _____ |
| 24) $21 \times 2 =$ _____ | 29) $14 \times 2 =$ _____ | 34) $42 \times 2 =$ _____ | 39) $34 \times 2 =$ _____ |
| 25) $27 \times 2 =$ _____ | 30) $28 \times 2 =$ _____ | 35) $46 \times 2 =$ _____ | 40) $43 \times 2 =$ _____ |

x10, x100 or x1000, including decimals

- | | |
|--------------------------------|--------------------------------|
| 41) $6.3 \times 1,000 =$ _____ | 46) $64.0 \times 10 =$ _____ |
| 42) $39.5 \times 10 =$ _____ | 47) $126 \times 1,000 =$ _____ |
| 43) $102 \times 10 =$ _____ | 48) $46.1 \times 100 =$ _____ |
| 44) $949 \times 100 =$ _____ | 49) $878 \times 1,000 =$ _____ |
| 45) $497 \times 100 =$ _____ | 50) $7.2 \times 10 =$ _____ |

Time:

Score:

Doubling 2-digit Numbers: 3 [B]



x 10, 100, 1000

÷ 10, 100, 1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

x5

x 50, 25

Revision

Doubling 2-digit numbers

Double both places, starting with the tens.

For example, Double 23: double the 2 (tens), double the 3: 4 tens + 6 = 46.

Doubling without regrouping

- | | | | |
|--------------------------|---------------------------|---------------------------|---------------------------|
| 1) $24 \times 2 =$ _____ | 6) $44 \times 2 =$ _____ | 11) $13 \times 2 =$ _____ | 16) $83 \times 2 =$ _____ |
| 2) $54 \times 2 =$ _____ | 7) $72 \times 2 =$ _____ | 12) $54 \times 2 =$ _____ | 17) $30 \times 2 =$ _____ |
| 3) $73 \times 2 =$ _____ | 8) $42 \times 2 =$ _____ | 13) $20 \times 2 =$ _____ | 18) $32 \times 2 =$ _____ |
| 4) $71 \times 2 =$ _____ | 9) $91 \times 2 =$ _____ | 14) $50 \times 2 =$ _____ | 19) $93 \times 2 =$ _____ |
| 5) $12 \times 2 =$ _____ | 10) $63 \times 2 =$ _____ | 15) $81 \times 2 =$ _____ | 20) $64 \times 2 =$ _____ |

Doubling 2-digit numbers with regrouping

Start with the hundreds, then double the tens and the ones. If regrouping is required, try to remember that the extra one is needed without writing it down. If needed, each digit can be written lightly, so that if regrouping is needed, the digit can be overwritten with the new value, as on worksheet 3[A]. Some of these questions will require extra time to reach the answer.

Doubling with regrouping

- | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|
| 21) $46 \times 2 =$ _____ | 26) $72 \times 2 =$ _____ | 31) $62 \times 2 =$ _____ | 36) $25 \times 2 =$ _____ |
| 22) $87 \times 2 =$ _____ | 27) $67 \times 2 =$ _____ | 32) $98 \times 2 =$ _____ | 37) $47 \times 2 =$ _____ |
| 23) $68 \times 2 =$ _____ | 28) $46 \times 2 =$ _____ | 33) $54 \times 2 =$ _____ | 38) $75 \times 2 =$ _____ |
| 24) $38 \times 2 =$ _____ | 29) $19 \times 2 =$ _____ | 34) $49 \times 2 =$ _____ | 39) $38 \times 2 =$ _____ |
| 25) $75 \times 2 =$ _____ | 30) $87 \times 2 =$ _____ | 35) $26 \times 2 =$ _____ | 40) $97 \times 2 =$ _____ |

x10, x100 or x1000, including decimals

- | | |
|--------------------------------|--------------------------------|
| 41) $6.3 \times 1,000 =$ _____ | 46) $64.0 \times 10 =$ _____ |
| 42) $39.5 \times 10 =$ _____ | 47) $126 \times 1,000 =$ _____ |
| 43) $102 \times 10 =$ _____ | 48) $46.1 \times 100 =$ _____ |
| 44) $949 \times 100 =$ _____ | 49) $878 \times 1,000 =$ _____ |
| 45) $497 \times 100 =$ _____ | 50) $7.2 \times 10 =$ _____ |

Time:

Score:

Doubling 3-digit Numbers: 3 [C]


 x 10,100,1000
 ÷ 10,100,1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

x5

x 50,25

Revision

Doubling 3-digit numbers

Double each place in turn, starting with hundreds, then tens and ones.

For example, Double 431: double 4 (hundreds) + double 3 (tens) + double 1 (one) = 8 hundreds + 6 tens + 2 ones = 862.

Doubling without regrouping

- | | | | |
|---------------------------|----------------------------|----------------------------|----------------------------|
| 1) $242 \times 2 =$ _____ | 6) $122 \times 2 =$ _____ | 11) $422 \times 2 =$ _____ | 16) $312 \times 2 =$ _____ |
| 2) $434 \times 2 =$ _____ | 7) $414 \times 2 =$ _____ | 12) $203 \times 2 =$ _____ | 17) $124 \times 2 =$ _____ |
| 3) $411 \times 2 =$ _____ | 8) $220 \times 2 =$ _____ | 13) $343 \times 2 =$ _____ | 18) $243 \times 2 =$ _____ |
| 4) $234 \times 2 =$ _____ | 9) $403 \times 2 =$ _____ | 14) $241 \times 2 =$ _____ | 19) $240 \times 2 =$ _____ |
| 5) $341 \times 2 =$ _____ | 10) $212 \times 2 =$ _____ | 15) $304 \times 2 =$ _____ | 20) $330 \times 2 =$ _____ |

Doubling 3-digit numbers with regrouping

Start with the hundreds, then double the tens and the ones. If regrouping is required, try to remember that the extra one is needed without writing it down. If needed, each digit can be written lightly, so that if regrouping is needed, the digit can be overwritten with the new value, as on worksheet 3[A]. Some of these questions will require extra time to reach the answer.

Doubling with regrouping

- | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|
| 21) $146 \times 2 =$ _____ | 26) $322 \times 2 =$ _____ | 31) $522 \times 2 =$ _____ | 36) $831 \times 2 =$ _____ |
| 22) $437 \times 2 =$ _____ | 27) $435 \times 2 =$ _____ | 32) $418 \times 2 =$ _____ | 37) $247 \times 2 =$ _____ |
| 23) $248 \times 2 =$ _____ | 28) $616 \times 2 =$ _____ | 33) $634 \times 2 =$ _____ | 38) $835 \times 2 =$ _____ |
| 24) $138 \times 2 =$ _____ | 29) $219 \times 2 =$ _____ | 34) $349 \times 2 =$ _____ | 39) $630 \times 2 =$ _____ |
| 25) $225 \times 2 =$ _____ | 30) $427 \times 2 =$ _____ | 35) $723 \times 2 =$ _____ | 40) $207 \times 2 =$ _____ |

Multiplication

- | | |
|---------------------------|---------------------------|
| 41) $5 \times 5 =$ _____ | 46) $8 \times 6 =$ _____ |
| 42) $8 \times 9 =$ _____ | 47) $9 \times 9 =$ _____ |
| 43) $10 \times 7 =$ _____ | 48) $8 \times 5 =$ _____ |
| 44) $9 \times 4 =$ _____ | 49) $6 \times 6 =$ _____ |
| 45) $6 \times 9 =$ _____ | 50) $10 \times 6 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 51) $32 \div 4 =$ _____ | 56) $40 \div 4 =$ _____ |
| 52) $16 \div 4 =$ _____ | 57) $90 \div 9 =$ _____ |
| 53) $64 \div 8 =$ _____ | 58) $24 \div 6 =$ _____ |
| 54) $70 \div 7 =$ _____ | 59) $36 \div 9 =$ _____ |
| 55) $48 \div 8 =$ _____ | 60) $28 \div 7 =$ _____ |

Time:

Score:

Doubling 3-digit Numbers: 3 [D]



x 10,100,1000

÷10,100,1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

x5

x 50,25

Revision

Doubling 3-digit numbers with regrouping

Start with the hundreds, then the tens and the ones.

Write digits lightly as you double them if you cannot remember them all.

Double these numbers

- | | | |
|---------------------------|----------------------------|----------------------------|
| 1) $288 \times 2 =$ _____ | 6) $105 \times 2 =$ _____ | 11) $484 \times 2 =$ _____ |
| 2) $852 \times 2 =$ _____ | 7) $196 \times 2 =$ _____ | 12) $909 \times 2 =$ _____ |
| 3) $925 \times 2 =$ _____ | 8) $515 \times 2 =$ _____ | 13) $734 \times 2 =$ _____ |
| 4) $714 \times 2 =$ _____ | 9) $382 \times 2 =$ _____ | 14) $850 \times 2 =$ _____ |
| 5) $837 \times 2 =$ _____ | 10) $643 \times 2 =$ _____ | 15) $825 \times 2 =$ _____ |

x10, x100 or x1000, including decimals

- | | |
|---------------------------------|----------------------------------|
| 16) $36.0 \times 1,000 =$ _____ | 21) $55.9 \times 1,000 =$ _____ |
| 17) $34 \times 100 =$ _____ | 22) $0.299 \times 1,000 =$ _____ |
| 18) $9.31 \times 1,000 =$ _____ | 23) $9.95 \times 100 =$ _____ |
| 19) $578 \times 1,000 =$ _____ | 24) $3.76 \times 100 =$ _____ |
| 20) $4.65 \times 10 =$ _____ | 25) $290 \times 100 =$ _____ |

Divide these numbers

- | | |
|--------------------------------|---------------------------------|
| 26) $2,391 \div 10 =$ _____ | 31) $19,420 \div 1,000 =$ _____ |
| 27) $7,796 \div 100 =$ _____ | 32) $158.94 \div 10 =$ _____ |
| 28) $146.1 \div 100 =$ _____ | 33) $86,494 \div 100 =$ _____ |
| 29) $1,171 \div 1,000 =$ _____ | 34) $57,471 \div 10 =$ _____ |
| 30) $1,548 \div 10 =$ _____ | 35) $2,202.4 \div 100 =$ _____ |

Addition revision

- | | |
|----------------------|---------------------|
| 36) $6 + 8 =$ _____ | 40) $9 + 4 =$ _____ |
| 37) $10 + 8 =$ _____ | 41) $3 + 6 =$ _____ |
| 38) $10 + 9 =$ _____ | 42) $5 + 7 =$ _____ |
| 39) $3 + 7 =$ _____ | 43) $8 + 4 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 44) $16 - 7 =$ _____ | 48) $10 - 4 =$ _____ |
| 45) $12 - 3 =$ _____ | 49) $17 - 9 =$ _____ |
| 46) $9 - 2 =$ _____ | 50) $17 - 8 =$ _____ |
| 47) $14 - 9 =$ _____ | 51) $15 - 7 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Halving 2-digit Numbers: 4 [A]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Halving 2-digit numbers

Being able to halve a number is often useful, for example when simplifying common fractions, Sharing money etc.

Halving 2-digit numbers without regrouping

Halve the tens, then halve the ones.

For example, halve 48: Half 4 (tens) + half 8 (ones) = 2 tens + 4 ones = 24.

Halve these numbers

- | | | | |
|------------------------|-------------------------|-------------------------|-------------------------|
| 1) $23 \div 2 =$ _____ | 2) $46 \div 2 =$ _____ | 11) $82 \div 2 =$ _____ | 12) $66 \div 2 =$ _____ |
| 3) $22 \div 2 =$ _____ | 4) $60 \div 2 =$ _____ | 13) $26 \div 2 =$ _____ | 14) $84 \div 2 =$ _____ |
| 5) $12 \div 2 =$ _____ | 6) $22 \div 2 =$ _____ | 15) $42 \div 2 =$ _____ | 16) $22 \div 2 =$ _____ |
| 7) $44 \div 2 =$ _____ | 8) $68 \div 2 =$ _____ | 17) $88 \div 2 =$ _____ | 18) $80 \div 2 =$ _____ |
| 9) $24 \div 2 =$ _____ | 10) $30 \div 2 =$ _____ | 19) $20 \div 2 =$ _____ | 20) $24 \div 2 =$ _____ |

Halving 2-digit numbers with regrouping

Start with the tens, then the ones. If there is an odd number of tens, take half of the number one less, then add ten to the ones for halving. For example, halve 74: half 6 (tens) + half 14 (ones) = 3 tens + 7 ones = 37.

Halve these numbers

- | | | | |
|-------------------------|-------------------------|-------------------------|-------------------------|
| 21) $76 \div 2 =$ _____ | 22) $72 \div 2 =$ _____ | 31) $76 \div 2 =$ _____ | 32) $96 \div 2 =$ _____ |
| 23) $54 \div 2 =$ _____ | 24) $32 \div 2 =$ _____ | 33) $36 \div 2 =$ _____ | 34) $52 \div 2 =$ _____ |
| 25) $38 \div 2 =$ _____ | 26) $46 \div 2 =$ _____ | 35) $58 \div 2 =$ _____ | 36) $54 \div 2 =$ _____ |
| 27) $36 \div 2 =$ _____ | 28) $52 \div 2 =$ _____ | 37) $34 \div 2 =$ _____ | 38) $62 \div 2 =$ _____ |
| 29) $84 \div 2 =$ _____ | 30) $62 \div 2 =$ _____ | 39) $72 \div 2 =$ _____ | 40) $56 \div 2 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 41) $281 \times 2 =$ _____ | 45) $218 \times 2 =$ _____ | 49) $749 \times 2 =$ _____ |
| 42) $721 \times 2 =$ _____ | 46) $380 \times 2 =$ _____ | 50) $752 \times 2 =$ _____ |
| 43) $737 \times 2 =$ _____ | 47) $444 \times 2 =$ _____ | 51) $476 \times 2 =$ _____ |
| 44) $714 \times 2 =$ _____ | 48) $299 \times 2 =$ _____ | 52) $534 \times 2 =$ _____ |

Time:

Score:

Halving 2-digit Numbers: 4 [B]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Halving 2-digit numbers with regrouping

Start with the tens, then the ones. If there is an odd number of tens, take half of the number one less, then add ten to the ones for halving. For example, halve 74: half 6 (tens) + half 14 (ones) = 3 tens + 7 ones = 37.

Halve these numbers

- | | | | |
|------------------------|-------------------------|-------------------------|-------------------------|
| 1) $30 \div 2 =$ _____ | 2) $84 \div 2 =$ _____ | 11) $64 \div 2 =$ _____ | 12) $38 \div 2 =$ _____ |
| 3) $74 \div 2 =$ _____ | 4) $26 \div 2 =$ _____ | 13) $26 \div 2 =$ _____ | 14) $78 \div 2 =$ _____ |
| 5) $98 \div 2 =$ _____ | 6) $34 \div 2 =$ _____ | 15) $72 \div 2 =$ _____ | 16) $70 \div 2 =$ _____ |
| 7) $52 \div 2 =$ _____ | 8) $96 \div 2 =$ _____ | 17) $54 \div 2 =$ _____ | 18) $82 \div 2 =$ _____ |
| 9) $50 \div 2 =$ _____ | 10) $72 \div 2 =$ _____ | 19) $72 \div 2 =$ _____ | 20) $40 \div 2 =$ _____ |

x10, x100 or x1000, including decimals

- | | |
|---------------------------------|---------------------------------|
| 21) $281 \times 10 =$ _____ | 26) $2.90 \times 10 =$ _____ |
| 22) $7.62 \times 1,000 =$ _____ | 27) $1.08 \times 1,000 =$ _____ |
| 23) $41.8 \times 10 =$ _____ | 28) $2.14 \times 10 =$ _____ |
| 24) $71.3 \times 10 =$ _____ | 29) $0.704 \times 100 =$ _____ |
| 25) $899 \times 1,000 =$ _____ | 30) $0.25 \times 100 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $128 \times 2 =$ _____ | 35) $113 \times 2 =$ _____ | 39) $271 \times 2 =$ _____ |
| 32) $826 \times 2 =$ _____ | 36) $288 \times 2 =$ _____ | 40) $933 \times 2 =$ _____ |
| 33) $361 \times 2 =$ _____ | 37) $131 \times 2 =$ _____ | 41) $620 \times 2 =$ _____ |
| 34) $952 \times 2 =$ _____ | 38) $425 \times 2 =$ _____ | 42) $430 \times 2 =$ _____ |

Addition revision

- | | |
|----------------------|----------------------|
| 43) $7 + 4 =$ _____ | 48) $9 + 7 =$ _____ |
| 44) $10 + 4 =$ _____ | 49) $10 + 7 =$ _____ |
| 45) $4 + 6 =$ _____ | 50) $6 + 8 =$ _____ |
| 46) $4 + 4 =$ _____ | 51) $8 + 4 =$ _____ |
| 47) $3 + 6 =$ _____ | 52) $9 + 8 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 53) $17 - 9 =$ _____ | 58) $10 - 5 =$ _____ |
| 54) $16 - 8 =$ _____ | 59) $12 - 4 =$ _____ |
| 55) $17 - 8 =$ _____ | 60) $8 - 2 =$ _____ |
| 56) $14 - 5 =$ _____ | 61) $9 - 2 =$ _____ |
| 57) $7 - 2 =$ _____ | 62) $11 - 5 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Halving 3-digit Numbers: 4 [C]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

 – Nr 100
 x5

 x 50,25
 Revision
Halving 3-digit numbers

Being able to halve a number is often useful, for example when simplifying common fractions, sharing money etc.

Halving 3-digit numbers without regrouping

Halve the hundreds, halve the tens, then halve the ones.

For example, halve 248: Half 2 (hundreds) + half 4 (tens) + half 8 (ones) = 1 hundred + 2 tens + 4 ones = 124.

Halving 3-digit numbers without regrouping

- | | | | |
|-------------------------|--------------------------|--------------------------|--------------------------|
| 1) $628 \div 2 =$ _____ | 2) $426 \div 2 =$ _____ | 11) $604 \div 2 =$ _____ | 12) $646 \div 2 =$ _____ |
| 3) $284 \div 2 =$ _____ | 4) $624 \div 2 =$ _____ | 13) $482 \div 2 =$ _____ | 14) $288 \div 2 =$ _____ |
| 5) $404 \div 2 =$ _____ | 6) $262 \div 2 =$ _____ | 15) $842 \div 2 =$ _____ | 16) $442 \div 2 =$ _____ |
| 7) $822 \div 2 =$ _____ | 8) $840 \div 2 =$ _____ | 17) $244 \div 2 =$ _____ | 18) $602 \div 2 =$ _____ |
| 9) $448 \div 2 =$ _____ | 10) $240 \div 2 =$ _____ | 19) $828 \div 2 =$ _____ | 20) $420 \div 2 =$ _____ |

Halving 3-digit numbers with regrouping

When a number has a "1" digit, group it with the next digit for halving. For example, halve 184: this number has 18 tens, which can be halved, and 4 ones. Half 184 = 92.

Halving 3-digit numbers with regrouping

- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 21) $128 \div 2 =$ _____ | 22) $128 \div 2 =$ _____ | 31) $812 \div 2 =$ _____ | 32) $820 \div 2 =$ _____ |
| 23) $610 \div 2 =$ _____ | 24) $870 \div 2 =$ _____ | 33) $614 \div 2 =$ _____ | 34) $104 \div 2 =$ _____ |
| 25) $188 \div 2 =$ _____ | 26) $108 \div 2 =$ _____ | 35) $408 \div 2 =$ _____ | 36) $130 \div 2 =$ _____ |
| 27) $414 \div 2 =$ _____ | 28) $162 \div 2 =$ _____ | 37) $650 \div 2 =$ _____ | 38) $814 \div 2 =$ _____ |
| 29) $816 \div 2 =$ _____ | 30) $124 \div 2 =$ _____ | 39) $410 \div 2 =$ _____ | 40) $128 \div 2 =$ _____ |

Doubling 3-digit numbers with regrouping

- | | | |
|----------------------------|----------------------------|----------------------------|
| 41) $361 \times 2 =$ _____ | 45) $113 \times 2 =$ _____ | 49) $128 \times 2 =$ _____ |
| 42) $271 \times 2 =$ _____ | 46) $942 \times 2 =$ _____ | 50) $131 \times 2 =$ _____ |
| 43) $933 \times 2 =$ _____ | 47) $826 \times 2 =$ _____ | 51) $425 \times 2 =$ _____ |
| 44) $620 \times 2 =$ _____ | 48) $282 \times 2 =$ _____ | 52) $430 \times 2 =$ _____ |

Time:

Score:

Halving 3-digit Numbers: 4 [D]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Halve these numbers

- 1) $326 \div 2 =$ _____ 2) $490 \div 2 =$ _____ 11) $740 \div 2 =$ _____ 12) $148 \div 2 =$ _____
- 3) $706 \div 2 =$ _____ 4) $308 \div 2 =$ _____ 13) $314 \div 2 =$ _____ 14) $704 \div 2 =$ _____
- 5) $816 \div 2 =$ _____ 6) $154 \div 2 =$ _____ 15) $274 \div 2 =$ _____ 16) $726 \div 2 =$ _____
- 7) $888 \div 2 =$ _____ 8) $606 \div 2 =$ _____ 17) $948 \div 2 =$ _____ 18) $170 \div 2 =$ _____
- 9) $130 \div 2 =$ _____ 10) $524 \div 2 =$ _____ 19) $820 \div 2 =$ _____ 20) $944 \div 2 =$ _____

÷ 10, ÷ 100, ÷ 1000

- 21) $3,474 \div 1,000 =$ _____ 26) $691 \div 1,000 =$ _____
- 22) $4,601 \div 10 =$ _____ 27) $938 \div 10 =$ _____
- 23) $861 \div 100 =$ _____ 28) $78,000 \div 100 =$ _____
- 24) $2,766 \div 100 =$ _____ 29) $60,270 \div 1,000 =$ _____
- 25) $2,696 \div 10 =$ _____ 30) $12,904 \div 10 =$ _____

Double these numbers

- 31) $115 \times 2 =$ _____ 35) $882 \times 2 =$ _____ 39) $117 \times 2 =$ _____
- 32) $304 \times 2 =$ _____ 36) $775 \times 2 =$ _____ 40) $419 \times 2 =$ _____
- 33) $526 \times 2 =$ _____ 37) $469 \times 2 =$ _____ 41) $710 \times 2 =$ _____
- 34) $922 \times 2 =$ _____ 38) $133 \times 2 =$ _____ 42) $535 \times 2 =$ _____

Addition revision

- 43) $3 + 9 =$ _____ 48) $8 + 6 =$ _____
- 44) $3 + 5 =$ _____ 49) $10 + 6 =$ _____
- 45) $5 + 8 =$ _____ 50) $9 + 8 =$ _____
- 46) $9 + 9 =$ _____ 51) $4 + 6 =$ _____
- 47) $10 + 7 =$ _____ 52) $8 + 8 =$ _____

Subtraction revision

- 53) $13 - 5 =$ _____ 58) $12 - 5 =$ _____
- 54) $16 - 8 =$ _____ 59) $17 - 8 =$ _____
- 55) $13 - 7 =$ _____ 60) $11 - 6 =$ _____
- 56) $13 - 8 =$ _____ 61) $17 - 9 =$ _____
- 57) $15 - 8 =$ _____ 62) $9 - 1 =$ _____

Time:

Score:

Adding "Nice" Numbers: 5 [A]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Adding pairs of “nice” numbers:

When mentally adding a set of numbers, proficient thinkers will look for numbers which add easily together. These pairs will usually be two numbers whose sum is 10 or 100.

Cross off the numbers as they are added so as not to get confused.

For example: $\cancel{7} + 6 + \cancel{8} + \cancel{2} + \cancel{3} = 20 + 6 = 26$

Add the "nice" numbers to find the sum (cross them off as you add them).

- 1) $7 + 3 + 8 + 2 + 8 =$ _____
- 2) $2 + 8 + 7 + 3 + 7 =$ _____
- 3) $5 + 1 + 5 + 1 + 9 =$ _____
- 4) $6 + 2 + 9 + 8 + 4 =$ _____
- 5) $1 + 8 + 9 + 2 + 9 =$ _____
- 6) $60 + 50 + 40 + 50 + 30 =$ _____
- 7) $5 + 1 + 8 + 5 + 2 =$ _____
- 8) $90 + 10 + 80 + 40 + 20 =$ _____
- 9) $3 + 7 + 5 + 1 + 9 =$ _____
- 10) $50 + 70 + 50 + 30 + 20 =$ _____

Halve these numbers

- 11) $338 \div 2 =$ _____
- 12) $358 \div 2 =$ _____
- 13) $930 \div 2 =$ _____
- 14) $136 \div 2 =$ _____
- 15) $596 \div 2 =$ _____
- 16) $202 \div 2 =$ _____
- 17) $196 \div 2 =$ _____
- 18) $818 \div 2 =$ _____
- 19) $668 \div 2 =$ _____
- 20) $644 \div 2 =$ _____
- 21) $770 \div 2 =$ _____
- 22) $122 \div 2 =$ _____
- 23) $502 \div 2 =$ _____
- 24) $82 \div 2 =$ _____
- 25) $902 \div 2 =$ _____

Double these numbers

- 26) $148 \times 2 =$ _____
- 31) $205 \times 2 =$ _____
- 36) $840 \times 2 =$ _____
- 27) $898 \times 2 =$ _____
- 32) $997 \times 2 =$ _____
- 37) $856 \times 2 =$ _____
- 28) $663 \times 2 =$ _____
- 33) $355 \times 2 =$ _____
- 38) $312 \times 2 =$ _____
- 29) $727 \times 2 =$ _____
- 34) $401 \times 2 =$ _____
- 39) $382 \times 2 =$ _____
- 30) $576 \times 2 =$ _____
- 35) $600 \times 2 =$ _____
- 40) $541 \times 2 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding "Nice" Numbers: 5 [B]



x 10,100,1000	Doubling Lg	Nice Numbers	- Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Adding sets of "nice" numbers:

Sometimes when adding a set of numbers, there may be 3 or more numbers which add easily together. These will usually be sets of numbers whose sum is 10 or 100.

Cross off the numbers as they are added so as not to get confused.

For example:

$$\cancel{8} + \cancel{4} + 2 + \overset{10}{\cancel{1}} + 3 = 10 + 5 = 15$$

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|--------------------------------|--------------------------------------|
| 1) $1 + 8 + 1 + 4 + 2 =$ _____ | 2) $30 + 20 + 20 + 30 + 40 =$ _____ |
| 3) $5 + 3 + 5 + 3 + 4 =$ _____ | 4) $70 + 70 + 30 + 40 + 30 =$ _____ |
| 5) $6 + 7 + 1 + 2 + 1 =$ _____ | 6) $30 + 40 + 60 + 40 + 30 =$ _____ |
| 7) $2 + 1 + 2 + 6 + 9 =$ _____ | 8) $20 + 60 + 20 + 40 + 30 =$ _____ |
| 9) $4 + 2 + 6 + 3 + 8 =$ _____ | 10) $10 + 40 + 10 + 40 + 50 =$ _____ |

Multiply these numbers including decimals

- | | |
|---------------------------------|---------------------------------|
| 11) $15.1 \times 10 =$ _____ | 16) $72.2 \times 1,000 =$ _____ |
| 12) $18.9 \times 1,000 =$ _____ | 17) $0.251 \times 10 =$ _____ |
| 13) $86.1 \times 10 =$ _____ | 18) $0.043 \times 10 =$ _____ |
| 14) $5.61 \times 1,000 =$ _____ | 19) $6.04 \times 1,000 =$ _____ |
| 15) $6.36 \times 100 =$ _____ | 20) $1.40 \times 1,000 =$ _____ |

Divide these numbers

- | | |
|--------------------------------|--------------------------------|
| 21) $314.4 \div 10 =$ _____ | 26) $95.06 \div 10 =$ _____ |
| 22) $9,134 \div 1,000 =$ _____ | 27) $9.67 \div 10 =$ _____ |
| 23) $29.20 \div 10 =$ _____ | 28) $38 \div 100 =$ _____ |
| 24) $9,545 \div 1,000 =$ _____ | 29) $249 \div 10 =$ _____ |
| 25) $5,593 \div 10 =$ _____ | 30) $2,305 \div 1,000 =$ _____ |

Time:

Score:

Adding "Nice" Numbers: 5 [C]



x 10,100,1000	Doubling Lg	Nice Numbers	- Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Adding sets of "nice" numbers:

Sometimes when adding a set of numbers, several numbers may add to 20.

Cross off the numbers as they are added so as not to get confused.

For example:

$$\cancel{5} + \cancel{7}^{12} + 2 + \cancel{8}^{20} + 3 = 20 + 5 = 25$$

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|--------------------------------|---------------------------------|
| 1) $5 + 8 + 7 + 2 + 2 =$ _____ | 6) $4 + 4 + 7 + 5 + 6 =$ _____ |
| 2) $5 + 2 + 4 + 9 + 7 =$ _____ | 7) $2 + 2 + 9 + 4 + 2 =$ _____ |
| 3) $9 + 8 + 3 + 3 + 5 =$ _____ | 8) $6 + 5 + 2 + 1 + 9 =$ _____ |
| 4) $2 + 4 + 7 + 9 + 8 =$ _____ | 9) $3 + 5 + 8 + 4 + 1 =$ _____ |
| 5) $8 + 1 + 7 + 9 + 3 =$ _____ | 10) $6 + 1 + 2 + 8 + 6 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 11) $336 \times 2 =$ _____ | 16) $255 \times 2 =$ _____ | 21) $769 \times 2 =$ _____ |
| 12) $492 \times 2 =$ _____ | 17) $113 \times 2 =$ _____ | 22) $233 \times 2 =$ _____ |
| 13) $448 \times 2 =$ _____ | 18) $810 \times 2 =$ _____ | 23) $812 \times 2 =$ _____ |
| 14) $828 \times 2 =$ _____ | 19) $973 \times 2 =$ _____ | 24) $820 \times 2 =$ _____ |
| 15) $989 \times 2 =$ _____ | 20) $274 \times 2 =$ _____ | 25) $792 \times 2 =$ _____ |

Halve these numbers

- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 26) $346 \div 2 =$ _____ | 27) $130 \div 2 =$ _____ | 36) $164 \div 2 =$ _____ | 37) $378 \div 2 =$ _____ |
| 28) $224 \div 2 =$ _____ | 29) $66 \div 2 =$ _____ | 38) $138 \div 2 =$ _____ | 39) $238 \div 2 =$ _____ |
| 30) $168 \div 2 =$ _____ | 31) $160 \div 2 =$ _____ | 40) $204 \div 2 =$ _____ | 41) $278 \div 2 =$ _____ |
| 32) $76 \div 2 =$ _____ | 33) $48 \div 2 =$ _____ | 42) $114 \div 2 =$ _____ | 43) $30 \div 2 =$ _____ |
| 34) $378 \div 2 =$ _____ | 35) $194 \div 2 =$ _____ | 44) $96 \div 2 =$ _____ | 45) $254 \div 2 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding Multiple "Nice" Numbers: 5 [D]



x 10,100,1000	Doubling Lg	Nice Numbers	- Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Adding multiple "nice" numbers:

If there are several of the same number, multiply them, then add the rest.

Cross off the numbers as they are multiplied or added so as not to get confused.

For example:

$$\cancel{7} + \cancel{7} + 2 + \cancel{7} + \cancel{7} + 4 = 28 + 6 = 34$$

4x7=28

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|------------------------------------|-------------------------------------|
| 1) $3 + 3 + 3 + 3 + 7 + 2 =$ _____ | 6) $7 + 7 + 1 + 6 + 7 + 7 =$ _____ |
| 2) $1 + 5 + 5 + 2 + 5 + 8 =$ _____ | 7) $4 + 9 + 4 + 4 + 4 + 4 =$ _____ |
| 3) $4 + 4 + 1 + 4 + 4 + 8 =$ _____ | 8) $1 + 4 + 7 + 7 + 7 + 6 =$ _____ |
| 4) $2 + 6 + 6 + 6 + 6 + 4 =$ _____ | 9) $9 + 9 + 9 + 9 + 8 + 1 =$ _____ |
| 5) $2 + 2 + 3 + 2 + 2 + 2 =$ _____ | 10) $6 + 4 + 4 + 1 + 4 + 4 =$ _____ |

Multiply these numbers including decimals

- | | |
|---------------------------------|---------------------------------|
| 11) $5.97 \times 1,000 =$ _____ | 16) $4.1 \times 100 =$ _____ |
| 12) $65.4 \times 100 =$ _____ | 17) $86.7 \times 1,000 =$ _____ |
| 13) $8.41 \times 100 =$ _____ | 18) $2.24 \times 1,000 =$ _____ |
| 14) $28.0 \times 10 =$ _____ | 19) $4.91 \times 1,000 =$ _____ |
| 15) $70.4 \times 10 =$ _____ | 20) $65.3 \times 10 =$ _____ |

Halve these numbers

- | | | |
|--------------------------|--------------------------|--------------------------|
| 21) $338 \div 2 =$ _____ | 22) $358 \div 2 =$ _____ | 23) $930 \div 2 =$ _____ |
| 24) $136 \div 2 =$ _____ | 25) $596 \div 2 =$ _____ | 26) $202 \div 2 =$ _____ |
| 27) $196 \div 2 =$ _____ | 28) $818 \div 2 =$ _____ | 29) $668 \div 2 =$ _____ |
| 30) $644 \div 2 =$ _____ | 31) $770 \div 2 =$ _____ | 32) $122 \div 2 =$ _____ |
| 33) $502 \div 2 =$ _____ | 34) $82 \div 2 =$ _____ | 35) $902 \div 2 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding Near 100: 6 [A]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

 - Nr 100
 x5

 x 50,25
 Revision
Adding near 100:

When adding near 100 numbers, a "compensation" method can often be used.

For example: $97 + 26 = (100 + 26) - 3 = (126 - 3) = 123$



As 97 is 3 less than 100, add 100 then take 3 off the answer.

Addition near 100

- | | | |
|----------------------|-----------------------|-----------------------|
| 1) $98 + 17 =$ _____ | 6) $96 + 39 =$ _____ | 11) $95 + 35 =$ _____ |
| 2) $97 + 39 =$ _____ | 7) $97 + 26 =$ _____ | 12) $96 + 42 =$ _____ |
| 3) $94 + 39 =$ _____ | 8) $93 + 25 =$ _____ | 13) $99 + 40 =$ _____ |
| 4) $97 + 11 =$ _____ | 9) $95 + 12 =$ _____ | 14) $98 + 26 =$ _____ |
| 5) $99 + 31 =$ _____ | 10) $95 + 32 =$ _____ | 15) $97 + 21 =$ _____ |

Halve these numbers

- | | | |
|--------------------------|--------------------------|--------------------------|
| 16) $176 \div 2 =$ _____ | 17) $440 \div 2 =$ _____ | 18) $100 \div 2 =$ _____ |
| 19) $704 \div 2 =$ _____ | 20) $790 \div 2 =$ _____ | 21) $910 \div 2 =$ _____ |
| 22) $494 \div 2 =$ _____ | 23) $556 \div 2 =$ _____ | 24) $624 \div 2 =$ _____ |
| 25) $986 \div 2 =$ _____ | 26) $452 \div 2 =$ _____ | 27) $804 \div 2 =$ _____ |
| 28) $870 \div 2 =$ _____ | 29) $318 \div 2 =$ _____ | 30) $22 \div 2 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $108 \times 2 =$ _____ | 36) $862 \times 2 =$ _____ | 41) $956 \times 2 =$ _____ |
| 32) $523 \times 2 =$ _____ | 37) $174 \times 2 =$ _____ | 42) $876 \times 2 =$ _____ |
| 33) $570 \times 2 =$ _____ | 38) $208 \times 2 =$ _____ | 43) $638 \times 2 =$ _____ |
| 34) $871 \times 2 =$ _____ | 39) $129 \times 2 =$ _____ | 44) $661 \times 2 =$ _____ |
| 35) $161 \times 2 =$ _____ | 40) $599 \times 2 =$ _____ | 45) $186 \times 2 =$ _____ |

Time:

Score:

Adding Near 100: 6 [B]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

 - Nr 100
 x5

 x 50,25
 Revision
Adding near 100 or another hundred

197 rounds to 200. Use the same strategy but with a different hundred this time.

Addition near 100

- | | | |
|-----------------------|------------------------|------------------------|
| 1) $18 + 291 =$ _____ | 6) $19 + 394 =$ _____ | 11) $194 + 48 =$ _____ |
| 2) $22 + 494 =$ _____ | 7) $31 + 292 =$ _____ | 12) $25 + 395 =$ _____ |
| 3) $291 + 24 =$ _____ | 8) $42 + 497 =$ _____ | 13) $13 + 595 =$ _____ |
| 4) $43 + 194 =$ _____ | 9) $25 + 296 =$ _____ | 14) $16 + 398 =$ _____ |
| 5) $32 + 192 =$ _____ | 10) $598 + 34 =$ _____ | 15) $26 + 297 =$ _____ |

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|---------------------------------|---------------------------------|
| 16) $6 + 8 + 2 + 3 + 8 =$ _____ | 17) $2 + 6 + 5 + 5 + 2 =$ _____ |
| 18) $8 + 5 + 6 + 7 + 1 =$ _____ | 19) $2 + 7 + 9 + 9 + 3 =$ _____ |
| 20) $1 + 9 + 8 + 6 + 5 =$ _____ | 21) $3 + 7 + 5 + 4 + 9 =$ _____ |
| 22) $3 + 8 + 8 + 6 + 8 =$ _____ | 23) $4 + 8 + 2 + 6 + 8 =$ _____ |
| 24) $7 + 7 + 6 + 4 + 7 =$ _____ | 25) $8 + 2 + 6 + 5 + 2 =$ _____ |

Halve these numbers

- | | | |
|--------------------------|--------------------------|--------------------------|
| 26) $252 \div 2 =$ _____ | 27) $730 \div 2 =$ _____ | 28) $800 \div 2 =$ _____ |
| 29) $796 \div 2 =$ _____ | 30) $974 \div 2 =$ _____ | 31) $746 \div 2 =$ _____ |
| 32) $984 \div 2 =$ _____ | 33) $784 \div 2 =$ _____ | 34) $722 \div 2 =$ _____ |
| 35) $688 \div 2 =$ _____ | 36) $902 \div 2 =$ _____ | 37) $636 \div 2 =$ _____ |
| 38) $766 \div 2 =$ _____ | 39) $778 \div 2 =$ _____ | 40) $574 \div 2 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 41) $947 \times 2 =$ _____ | 43) $859 \times 2 =$ _____ | 45) $738 \times 2 =$ _____ |
| 42) $170 \times 2 =$ _____ | 44) $664 \times 2 =$ _____ | 46) $332 \times 2 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding Near 100: 6 [C]


 x 10,100,1000
 ÷ 10,100,1000

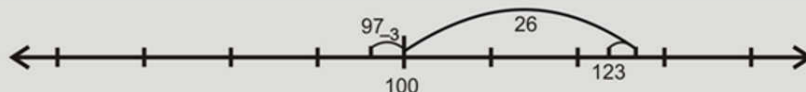
 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

 - Nr 100
 x5

 x 50,25
 Revision
Adding just over 100:

When adding numbers just over 100, add the "extra" first, then the hundred.

 For example: $106 + 27 = (6 + 27) + 100 = 33 + 100 = 133$
**Addition near 100**

- | | | |
|-----------------------|------------------------|------------------------|
| 1) $101 + 34 =$ _____ | 6) $106 + 22 =$ _____ | 11) $205 + 17 =$ _____ |
| 2) $108 + 25 =$ _____ | 7) $102 + 40 =$ _____ | 12) $404 + 37 =$ _____ |
| 3) $103 + 22 =$ _____ | 8) $107 + 25 =$ _____ | 13) $303 + 23 =$ _____ |
| 4) $107 + 23 =$ _____ | 9) $108 + 40 =$ _____ | 14) $203 + 38 =$ _____ |
| 5) $104 + 14 =$ _____ | 10) $104 + 41 =$ _____ | 15) $301 + 33 =$ _____ |

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|---------------------------------|---------------------------------|
| 16) $2 + 3 + 8 + 5 + 4 =$ _____ | 17) $4 + 6 + 8 + 7 + 3 =$ _____ |
| 18) $8 + 7 + 6 + 3 + 4 =$ _____ | 19) $2 + 2 + 4 + 4 + 3 =$ _____ |
| 20) $9 + 5 + 6 + 1 + 7 =$ _____ | 21) $8 + 7 + 6 + 2 + 2 =$ _____ |
| 22) $2 + 5 + 5 + 1 + 7 =$ _____ | 23) $6 + 6 + 7 + 6 + 8 =$ _____ |
| 24) $3 + 2 + 8 + 3 + 2 =$ _____ | 25) $5 + 2 + 8 + 5 + 8 =$ _____ |

Addition revision

- | | |
|----------------------|---------------------|
| 26) $4 + 5 =$ _____ | 29) $9 + 8 =$ _____ |
| 27) $4 + 6 =$ _____ | 30) $7 + 8 =$ _____ |
| 28) $10 + 9 =$ _____ | 31) $4 + 7 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 38) $13 - 4 =$ _____ | 41) $18 - 9 =$ _____ |
| 39) $12 - 4 =$ _____ | 42) $13 - 7 =$ _____ |
| 40) $17 - 9 =$ _____ | 43) $13 - 5 =$ _____ |

Multiplication

- | | |
|---------------------------|--------------------------|
| 32) $7 \times 8 =$ _____ | 35) $6 \times 5 =$ _____ |
| 33) $10 \times 5 =$ _____ | 36) $7 \times 5 =$ _____ |
| 34) $3 \times 6 =$ _____ | 37) $5 \times 5 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 44) $24 \div 8 =$ _____ | 47) $18 \div 9 =$ _____ |
| 45) $54 \div 9 =$ _____ | 48) $40 \div 5 =$ _____ |
| 46) $56 \div 8 =$ _____ | 49) $35 \div 7 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding Near 100: 6 [D]

x 10,100,1000
÷10,100,1000Doubling Lg
Halving LgNice Numbers
+ Nr 100

- Nr 100

x5

x 50,25
Revision**Addition near 100**

- 1) $96 + 36 =$ _____ 6) $307 + 37 =$ _____ 11) $98 + 43 =$ _____
 2) $98 + 14 =$ _____ 7) $108 + 19 =$ _____ 12) $207 + 10 =$ _____
 3) $204 + 29 =$ _____ 8) $294 + 28 =$ _____ 13) $108 + 44 =$ _____
 4) $199 + 30 =$ _____ 9) $91 + 24 =$ _____ 14) $101 + 15 =$ _____
 5) $91 + 16 =$ _____ 10) $104 + 19 =$ _____ 15) $190 + 12 =$ _____

Double these numbers

- 16) $148 \times 2 =$ _____ 21) $205 \times 2 =$ _____ 26) $840 \times 2 =$ _____
 17) $898 \times 2 =$ _____ 22) $997 \times 2 =$ _____ 27) $856 \times 2 =$ _____
 18) $663 \times 2 =$ _____ 23) $355 \times 2 =$ _____ 28) $312 \times 2 =$ _____
 19) $727 \times 2 =$ _____ 24) $401 \times 2 =$ _____ 29) $382 \times 2 =$ _____
 20) $576 \times 2 =$ _____ 25) $600 \times 2 =$ _____ 30) $541 \times 2 =$ _____

Halve these numbers

- 31) $338 \div 2 =$ _____ 32) $358 \div 2 =$ _____ 33) $930 \div 2 =$ _____
 34) $136 \div 2 =$ _____ 35) $596 \div 2 =$ _____ 36) $202 \div 2 =$ _____
 37) $196 \div 2 =$ _____ 38) $818 \div 2 =$ _____ 39) $668 \div 2 =$ _____
 40) $644 \div 2 =$ _____ 41) $770 \div 2 =$ _____ 42) $122 \div 2 =$ _____
 43) $502 \div 2 =$ _____ 44) $82 \div 2 =$ _____ 45) $902 \div 2 =$ _____

Addition revision

- 46) $4 + 5 =$ _____ 49) $9 + 8 =$ _____
 47) $4 + 6 =$ _____ 50) $7 + 8 =$ _____
 48) $10 + 9 =$ _____ 51) $4 + 7 =$ _____

Subtraction revision

- 56) $13 - 4 =$ _____ 59) $18 - 9 =$ _____
 57) $12 - 4 =$ _____ 60) $13 - 7 =$ _____
 58) $17 - 9 =$ _____ 61) $13 - 5 =$ _____

Multiplication

- 52) $10 \times 9 =$ _____ 54) $10 \times 6 =$ _____
 53) $9 \times 6 =$ _____ 55) $8 \times 8 =$ _____

Division

- 62) $30 \div 6 =$ _____ 64) $48 \div 8 =$ _____
 63) $72 \div 9 =$ _____ 65) $64 \div 8 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Subtracting Near 100: 7 [A]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

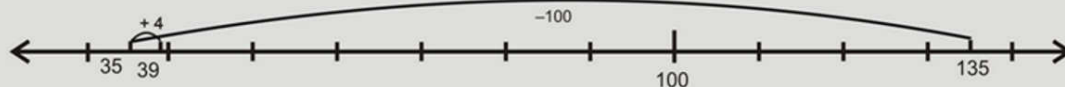
 Nice Numbers
 + Nr 100

 - Nr 100
 x5

 x 50,25
 Revision
Subtracting near 100:

When subtracting a number just less than 100, we can first take away 100, then compensate by adding the difference.

For example: $135 - 96 = (135 - 100) + 4 = 35 + 4 = 39$

**Subtraction near 100**

- | | | |
|-----------------------|------------------------|------------------------|
| 1) $125 - 91 =$ _____ | 6) $135 - 96 =$ _____ | 11) $127 - 96 =$ _____ |
| 2) $120 - 98 =$ _____ | 7) $135 - 97 =$ _____ | 12) $132 - 96 =$ _____ |
| 3) $137 - 97 =$ _____ | 8) $118 - 98 =$ _____ | 13) $138 - 94 =$ _____ |
| 4) $115 - 97 =$ _____ | 9) $127 - 95 =$ _____ | 14) $109 - 95 =$ _____ |
| 5) $138 - 99 =$ _____ | 10) $143 - 92 =$ _____ | 15) $116 - 92 =$ _____ |

Addition near 100

- | | | |
|------------------------|------------------------|------------------------|
| 16) $198 + 24 =$ _____ | 21) $196 + 41 =$ _____ | 26) $103 + 36 =$ _____ |
| 17) $591 + 13 =$ _____ | 22) $94 + 12 =$ _____ | 27) $299 + 41 =$ _____ |
| 18) $91 + 20 =$ _____ | 23) $100 + 24 =$ _____ | 28) $404 + 14 =$ _____ |
| 19) $107 + 10 =$ _____ | 24) $306 + 26 =$ _____ | 29) $96 + 25 =$ _____ |
| 20) $206 + 36 =$ _____ | 25) $105 + 34 =$ _____ | 30) $95 + 23 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $340 \times 2 =$ _____ | 34) $751 \times 2 =$ _____ | 37) $306 \times 2 =$ _____ |
| 32) $686 \times 2 =$ _____ | 35) $344 \times 2 =$ _____ | 38) $523 \times 2 =$ _____ |
| 33) $608 \times 2 =$ _____ | 36) $165 \times 2 =$ _____ | 39) $939 \times 2 =$ _____ |

Multiplication

- | | |
|---------------------------|---------------------------|
| 40) $5 \times 5 =$ _____ | 44) $10 \times 6 =$ _____ |
| 41) $9 \times 8 =$ _____ | 45) $10 \times 7 =$ _____ |
| 42) $10 \times 5 =$ _____ | 46) $9 \times 5 =$ _____ |
| 43) $9 \times 9 =$ _____ | 47) $6 \times 7 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 48) $64 \div 8 =$ _____ | 52) $35 \div 5 =$ _____ |
| 49) $50 \div 5 =$ _____ | 53) $60 \div 6 =$ _____ |
| 50) $40 \div 8 =$ _____ | 54) $49 \div 7 =$ _____ |
| 51) $80 \div 8 =$ _____ | 55) $25 \div 5 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Subtracting Near 100: 7 [B]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

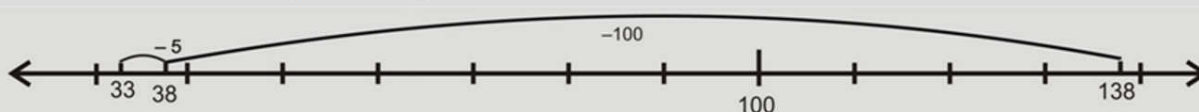
 Nice Numbers
 + Nr 100

 - Nr 100
 x5

 x 50,25
 Revision
Subtracting near 100:

When subtracting numbers just over 100, subtract the hundred first, then the "extra".

For example: $138 - 105 = (138 - 100) - 5 = 138 - 5 = 133$

**Subtraction near 100**

- | | | |
|------------------------|-------------------------|-------------------------|
| 1) $140 - 107 =$ _____ | 6) $110 - 105 =$ _____ | 11) $212 - 108 =$ _____ |
| 2) $120 - 104 =$ _____ | 7) $131 - 104 =$ _____ | 12) $111 - 103 =$ _____ |
| 3) $133 - 107 =$ _____ | 8) $212 - 106 =$ _____ | 13) $439 - 108 =$ _____ |
| 4) $127 - 107 =$ _____ | 9) $116 - 104 =$ _____ | 14) $140 - 108 =$ _____ |
| 5) $143 - 106 =$ _____ | 10) $321 - 102 =$ _____ | 15) $114 - 103 =$ _____ |

Addition near 100

- | | | |
|------------------------|------------------------|------------------------|
| 16) $198 + 24 =$ _____ | 21) $196 + 41 =$ _____ | 26) $103 + 36 =$ _____ |
| 17) $591 + 13 =$ _____ | 22) $94 + 12 =$ _____ | 27) $299 + 41 =$ _____ |
| 18) $91 + 20 =$ _____ | 23) $100 + 24 =$ _____ | 28) $404 + 14 =$ _____ |
| 19) $107 + 10 =$ _____ | 24) $306 + 26 =$ _____ | 29) $96 + 25 =$ _____ |
| 20) $206 + 36 =$ _____ | 25) $105 + 34 =$ _____ | 30) $95 + 23 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $340 \times 2 =$ _____ | 34) $751 \times 2 =$ _____ | 37) $306 \times 2 =$ _____ |
| 32) $686 \times 2 =$ _____ | 35) $344 \times 2 =$ _____ | 38) $523 \times 2 =$ _____ |
| 33) $608 \times 2 =$ _____ | 36) $165 \times 2 =$ _____ | 39) $939 \times 2 =$ _____ |

Multiplication

- | | |
|---------------------------|---------------------------|
| 40) $5 \times 5 =$ _____ | 44) $10 \times 6 =$ _____ |
| 41) $9 \times 8 =$ _____ | 45) $10 \times 7 =$ _____ |
| 42) $10 \times 5 =$ _____ | 46) $9 \times 5 =$ _____ |
| 43) $9 \times 9 =$ _____ | 47) $6 \times 7 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 48) $64 \div 8 =$ _____ | 52) $35 \div 5 =$ _____ |
| 49) $50 \div 5 =$ _____ | 53) $60 \div 6 =$ _____ |
| 50) $40 \div 8 =$ _____ | 54) $49 \div 7 =$ _____ |
| 51) $80 \div 8 =$ _____ | 55) $25 \div 5 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Subtracting Near 100: 7 [C]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100 x5	x 50,25 Revision
-------------------------------	---------------------------	--------------------------	----------------	---------------------

Subtraction near 100

- | | | |
|------------------------|------------------------|-------------------------|
| 1) $126 - 96 =$ _____ | 6) $139 - 93 =$ _____ | 11) $124 - 97 =$ _____ |
| 2) $112 - 93 =$ _____ | 7) $113 - 91 =$ _____ | 12) $340 - 105 =$ _____ |
| 3) $125 - 97 =$ _____ | 8) $528 - 90 =$ _____ | 13) $135 - 95 =$ _____ |
| 4) $124 - 101 =$ _____ | 9) $219 - 98 =$ _____ | 14) $131 - 103 =$ _____ |
| 5) $933 - 103 =$ _____ | 10) $142 - 98 =$ _____ | 15) $128 - 93 =$ _____ |

Addition near 100

- | | | |
|------------------------|------------------------|------------------------|
| 16) $198 + 24 =$ _____ | 21) $196 + 41 =$ _____ | 26) $103 + 36 =$ _____ |
| 17) $591 + 13 =$ _____ | 22) $94 + 12 =$ _____ | 27) $299 + 41 =$ _____ |
| 18) $91 + 20 =$ _____ | 23) $100 + 24 =$ _____ | 28) $404 + 14 =$ _____ |
| 19) $107 + 10 =$ _____ | 24) $306 + 26 =$ _____ | 29) $96 + 25 =$ _____ |
| 20) $206 + 36 =$ _____ | 25) $105 + 34 =$ _____ | 30) $95 + 23 =$ _____ |

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|-------------------------------------|-------------------------------------|
| 31) $6 + 1 + 9 + 8 + 2 + 5 =$ _____ | 36) $6 + 3 + 7 + 8 + 2 + 6 =$ _____ |
| 32) $4 + 8 + 6 + 3 + 2 + 7 =$ _____ | 37) $2 + 7 + 7 + 8 + 7 + 7 =$ _____ |
| 33) $5 + 2 + 5 + 1 + 7 + 2 =$ _____ | 38) $3 + 3 + 1 + 1 + 7 + 2 =$ _____ |
| 34) $9 + 7 + 7 + 5 + 7 + 9 =$ _____ | 39) $2 + 4 + 2 + 4 + 3 + 3 =$ _____ |
| 35) $2 + 6 + 4 + 5 + 5 + 1 =$ _____ | 40) $3 + 7 + 3 + 4 + 4 + 2 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 41) $173 \times 2 =$ _____ | 45) $959 \times 2 =$ _____ | 49) $193 \times 2 =$ _____ |
| 42) $385 \times 2 =$ _____ | 46) $821 \times 2 =$ _____ | 50) $836 \times 2 =$ _____ |
| 43) $376 \times 2 =$ _____ | 47) $907 \times 2 =$ _____ | 51) $820 \times 2 =$ _____ |
| 44) $183 \times 2 =$ _____ | 48) $360 \times 2 =$ _____ | 52) $226 \times 2 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Subtracting Near 100: 7 [D]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100 x5	x 50,25 Revision
-------------------------------	---------------------------	--------------------------	----------------	---------------------

Subtraction near 100

- | | | |
|------------------------|------------------------|-------------------------|
| 1) $132 - 93 =$ _____ | 6) $510 - 93 =$ _____ | 11) $138 - 95 =$ _____ |
| 2) $144 - 97 =$ _____ | 7) $142 - 94 =$ _____ | 12) $332 - 98 =$ _____ |
| 3) $144 - 94 =$ _____ | 8) $235 - 96 =$ _____ | 13) $141 - 98 =$ _____ |
| 4) $136 - 96 =$ _____ | 9) $118 - 98 =$ _____ | 14) $126 - 105 =$ _____ |
| 5) $141 - 103 =$ _____ | 10) $820 - 98 =$ _____ | 15) $140 - 95 =$ _____ |

Addition near 100

- | | | |
|------------------------|------------------------|------------------------|
| 16) $193 + 43 =$ _____ | 21) $206 + 26 =$ _____ | 26) $99 + 37 =$ _____ |
| 17) $91 + 37 =$ _____ | 22) $301 + 37 =$ _____ | 27) $191 + 23 =$ _____ |
| 18) $593 + 14 =$ _____ | 23) $99 + 45 =$ _____ | 28) $408 + 28 =$ _____ |
| 19) $103 + 22 =$ _____ | 24) $91 + 41 =$ _____ | 29) $102 + 26 =$ _____ |
| 20) $91 + 30 =$ _____ | 25) $94 + 31 =$ _____ | 30) $97 + 38 =$ _____ |

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|-------------------------------------|-------------------------------------|
| 31) $8 + 9 + 2 + 1 + 6 + 6 =$ _____ | 36) $4 + 6 + 7 + 6 + 7 + 2 =$ _____ |
| 32) $7 + 2 + 3 + 2 + 5 + 1 =$ _____ | 37) $2 + 9 + 2 + 1 + 2 + 2 =$ _____ |
| 33) $5 + 5 + 2 + 3 + 3 + 5 =$ _____ | 38) $1 + 1 + 4 + 8 + 8 + 3 =$ _____ |
| 34) $8 + 2 + 2 + 8 + 6 + 5 =$ _____ | 39) $2 + 4 + 3 + 6 + 8 + 4 =$ _____ |
| 35) $7 + 7 + 8 + 3 + 3 + 3 =$ _____ | 40) $8 + 8 + 8 + 8 + 5 + 2 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 41) $173 \times 2 =$ _____ | 45) $959 \times 2 =$ _____ | 49) $193 \times 2 =$ _____ |
| 42) $385 \times 2 =$ _____ | 46) $821 \times 2 =$ _____ | 50) $836 \times 2 =$ _____ |
| 43) $376 \times 2 =$ _____ | 47) $907 \times 2 =$ _____ | 51) $820 \times 2 =$ _____ |
| 44) $183 \times 2 =$ _____ | 48) $360 \times 2 =$ _____ | 52) $226 \times 2 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying 2- & 3-digit numbers by 5: 8 [A]

x 10,100,1000
÷10,100,1000Doubling Lg
Halving LgNice Numbers
+ Nr 100

– Nr 100

x 50,25

x5

Revision

Multiplying 2-digit numbers by 5

We can use the same strategy we used for the x5 number facts: multiply the number by 10 first, then halve it.
For example, 37×5 : $37 \times 10 = 370$. Half of 370 = 185 $38 \times 5 = 185$

2-digit numbers x 5

- | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|
| 1) $28 \times 10 =$ _____ | 6) $60 \times 5 =$ _____ | 11) $68 \times 5 =$ _____ | 16) $38 \times 5 =$ _____ |
| 2) $28 \times 5 =$ _____ | 7) $53 \times 5 =$ _____ | 12) $96 \times 5 =$ _____ | 17) $47 \times 5 =$ _____ |
| 3) $63 \times 10 =$ _____ | 8) $32 \times 5 =$ _____ | 13) $77 \times 5 =$ _____ | 18) $95 \times 5 =$ _____ |
| 4) $63 \times 5 =$ _____ | 9) $76 \times 5 =$ _____ | 14) $89 \times 5 =$ _____ | 19) $69 \times 5 =$ _____ |
| 5) $90 \times 5 =$ _____ | 10) $98 \times 5 =$ _____ | 15) $24 \times 5 =$ _____ | 20) $65 \times 5 =$ _____ |

3 digit numbers x 5

- | | | |
|-----------------------------|----------------------------|----------------------------|
| 21) $424 \times 10 =$ _____ | 25) $521 \times 5 =$ _____ | 29) $940 \times 5 =$ _____ |
| 22) $424 \times 5 =$ _____ | 26) $412 \times 5 =$ _____ | 30) $130 \times 5 =$ _____ |
| 23) $263 \times 10 =$ _____ | 27) $811 \times 5 =$ _____ | 31) $886 \times 5 =$ _____ |
| 24) $263 \times 5 =$ _____ | 28) $644 \times 5 =$ _____ | 32) $844 \times 5 =$ _____ |

Subtraction near 100

- | | | |
|-------------------------|-------------------------|-------------------------|
| 33) $126 - 108 =$ _____ | 38) $144 - 107 =$ _____ | 43) $126 - 106 =$ _____ |
| 34) $122 - 105 =$ _____ | 39) $211 - 98 =$ _____ | 44) $113 - 96 =$ _____ |
| 35) $138 - 104 =$ _____ | 40) $129 - 99 =$ _____ | 45) $514 - 100 =$ _____ |
| 36) $112 - 93 =$ _____ | 41) $344 - 92 =$ _____ | 46) $140 - 100 =$ _____ |
| 37) $134 - 106 =$ _____ | 42) $137 - 94 =$ _____ | 47) $127 - 98 =$ _____ |

Multiplication

- | | |
|---------------------------|---------------------------|
| 48) $5 \times 5 =$ _____ | 52) $10 \times 6 =$ _____ |
| 49) $9 \times 8 =$ _____ | 53) $10 \times 7 =$ _____ |
| 50) $10 \times 5 =$ _____ | 54) $9 \times 5 =$ _____ |
| 51) $9 \times 9 =$ _____ | 55) $6 \times 7 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 56) $64 \div 8 =$ _____ | 60) $35 \div 5 =$ _____ |
| 57) $50 \div 5 =$ _____ | 61) $60 \div 6 =$ _____ |
| 58) $40 \div 8 =$ _____ | 62) $49 \div 7 =$ _____ |
| 59) $80 \div 8 =$ _____ | 63) $25 \div 5 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying 2- & 3-digit numbers by 5: 8 [B]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x 50,25 x5	Revision
-------------------------------	---------------------------	--------------------------	----------	---------------	----------

2-digit numbers x 5

- | | | | |
|--------------------------|---------------------------|---------------------------|---------------------------|
| 1) $82 \times 5 =$ _____ | 6) $23 \times 5 =$ _____ | 11) $37 \times 5 =$ _____ | 16) $63 \times 5 =$ _____ |
| 2) $42 \times 5 =$ _____ | 7) $57 \times 5 =$ _____ | 12) $96 \times 5 =$ _____ | 17) $75 \times 5 =$ _____ |
| 3) $34 \times 5 =$ _____ | 8) $78 \times 5 =$ _____ | 13) $33 \times 5 =$ _____ | 18) $44 \times 5 =$ _____ |
| 4) $84 \times 5 =$ _____ | 9) $90 \times 5 =$ _____ | 14) $92 \times 5 =$ _____ | 19) $73 \times 5 =$ _____ |
| 5) $83 \times 5 =$ _____ | 10) $53 \times 5 =$ _____ | 15) $65 \times 5 =$ _____ | 20) $97 \times 5 =$ _____ |

Addition near 100

- | | | |
|------------------------|------------------------|------------------------|
| 21) $198 + 24 =$ _____ | 26) $196 + 41 =$ _____ | 31) $103 + 36 =$ _____ |
| 22) $591 + 13 =$ _____ | 27) $94 + 12 =$ _____ | 32) $299 + 41 =$ _____ |
| 23) $91 + 20 =$ _____ | 28) $100 + 24 =$ _____ | 33) $404 + 14 =$ _____ |
| 24) $107 + 10 =$ _____ | 29) $306 + 26 =$ _____ | 34) $96 + 25 =$ _____ |
| 25) $206 + 36 =$ _____ | 30) $105 + 34 =$ _____ | 35) $95 + 23 =$ _____ |

Divide these numbers

- | | |
|------------------------------|------------------------------|
| 36) $121 \div 10 =$ _____ | 41) $6,006 \div 100 =$ _____ |
| 37) $508 \div 1,000 =$ _____ | 42) $436 \div 1,000 =$ _____ |
| 38) $728 \div 10 =$ _____ | 43) $51.6 \div 100 =$ _____ |
| 39) $91.6 \div 100 =$ _____ | 44) $961 \div 10 =$ _____ |
| 40) $172 \div 10 =$ _____ | 45) $823 \div 1,000 =$ _____ |

Multiplication

- | | |
|---------------------------|---------------------------|
| 46) $5 \times 6 =$ _____ | 50) $9 \times 7 =$ _____ |
| 47) $5 \times 5 =$ _____ | 51) $10 \times 7 =$ _____ |
| 48) $8 \times 8 =$ _____ | 52) $8 \times 7 =$ _____ |
| 49) $10 \times 5 =$ _____ | 53) $6 \times 6 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 54) $45 \div 5 =$ _____ | 58) $35 \div 7 =$ _____ |
| 55) $48 \div 6 =$ _____ | 59) $90 \div 9 =$ _____ |
| 56) $40 \div 5 =$ _____ | 60) $54 \div 9 =$ _____ |
| 57) $64 \div 8 =$ _____ | 61) $63 \div 7 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying 2- & 3-digit numbers by 5: 8 [C]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x 50,25 x5	Revision
-------------------------------	---------------------------	--------------------------	----------	---------------	----------

2-digit numbers x 5

- | | | | |
|--------------------------|---------------------------|---------------------------|---------------------------|
| 1) $35 \times 5 =$ _____ | 6) $94 \times 5 =$ _____ | 11) $92 \times 5 =$ _____ | 16) $95 \times 5 =$ _____ |
| 2) $51 \times 5 =$ _____ | 7) $90 \times 5 =$ _____ | 12) $93 \times 5 =$ _____ | 17) $48 \times 5 =$ _____ |
| 3) $25 \times 5 =$ _____ | 8) $26 \times 5 =$ _____ | 13) $74 \times 5 =$ _____ | 18) $63 \times 5 =$ _____ |
| 4) $39 \times 5 =$ _____ | 9) $29 \times 5 =$ _____ | 14) $76 \times 5 =$ _____ | 19) $40 \times 5 =$ _____ |
| 5) $60 \times 5 =$ _____ | 10) $82 \times 5 =$ _____ | 15) $69 \times 5 =$ _____ | 20) $53 \times 5 =$ _____ |

Multiply these numbers including decimals

- | | |
|---------------------------------|--------------------------------|
| 21) $1.99 \times 100 =$ _____ | 26) $198 \times 1,000 =$ _____ |
| 22) $200 \times 10 =$ _____ | 27) $58.2 \times 10 =$ _____ |
| 23) $7.27 \times 1,000 =$ _____ | 28) $2.21 \times 10 =$ _____ |
| 24) $626 \times 100 =$ _____ | 29) $0.452 \times 10 =$ _____ |
| 25) $60.1 \times 100 =$ _____ | 30) $6.42 \times 100 =$ _____ |

Addition revision

- | | |
|---------------------|----------------------|
| 31) $6 + 5 =$ _____ | 36) $9 + 4 =$ _____ |
| 32) $9 + 8 =$ _____ | 37) $5 + 5 =$ _____ |
| 33) $4 + 6 =$ _____ | 38) $4 + 5 =$ _____ |
| 34) $5 + 8 =$ _____ | 39) $3 + 5 =$ _____ |
| 35) $7 + 4 =$ _____ | 40) $10 + 7 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 41) $10 - 5 =$ _____ | 46) $12 - 4 =$ _____ |
| 42) $9 - 4 =$ _____ | 47) $17 - 8 =$ _____ |
| 43) $17 - 9 =$ _____ | 48) $11 - 3 =$ _____ |
| 44) $14 - 6 =$ _____ | 49) $16 - 8 =$ _____ |
| 45) $9 - 2 =$ _____ | 50) $18 - 9 =$ _____ |

Multiplication

- | | |
|--------------------------|---------------------------|
| 51) $8 \times 7 =$ _____ | 56) $8 \times 9 =$ _____ |
| 52) $9 \times 5 =$ _____ | 57) $6 \times 5 =$ _____ |
| 53) $8 \times 6 =$ _____ | 58) $8 \times 5 =$ _____ |
| 54) $5 \times 9 =$ _____ | 59) $10 \times 6 =$ _____ |
| 55) $7 \times 8 =$ _____ | 60) $7 \times 5 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 61) $48 \div 8 =$ _____ | 66) $54 \div 6 =$ _____ |
| 62) $56 \div 8 =$ _____ | 67) $72 \div 8 =$ _____ |
| 63) $36 \div 6 =$ _____ | 68) $30 \div 6 =$ _____ |
| 64) $70 \div 7 =$ _____ | 69) $35 \div 5 =$ _____ |
| 65) $40 \div 5 =$ _____ | 70) $25 \div 5 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying 2- & 3-digit numbers by 5: 8 [D]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x 50,25 x5	Revision
-------------------------------	---------------------------	--------------------------	----------	---------------	----------

2 digit numbers x 5

- | | | | |
|--------------------------|---------------------------|---------------------------|---------------------------|
| 1) $66 \times 5 =$ _____ | 6) $77 \times 5 =$ _____ | 11) $95 \times 5 =$ _____ | 16) $71 \times 5 =$ _____ |
| 2) $65 \times 5 =$ _____ | 7) $81 \times 5 =$ _____ | 12) $93 \times 5 =$ _____ | 17) $61 \times 5 =$ _____ |
| 3) $64 \times 5 =$ _____ | 8) $46 \times 5 =$ _____ | 13) $62 \times 5 =$ _____ | 18) $89 \times 5 =$ _____ |
| 4) $38 \times 5 =$ _____ | 9) $68 \times 5 =$ _____ | 14) $54 \times 5 =$ _____ | 19) $32 \times 5 =$ _____ |
| 5) $23 \times 5 =$ _____ | 10) $67 \times 5 =$ _____ | 15) $75 \times 5 =$ _____ | 20) $28 \times 5 =$ _____ |

Multiply these numbers including decimals

- | | |
|---------------------------------|---------------------------------|
| 21) $8.01 \times 1,000 =$ _____ | 26) $87 \times 1,000 =$ _____ |
| 22) $7.74 \times 1,000 =$ _____ | 27) $66.8 \times 1,000 =$ _____ |
| 23) $51.9 \times 100 =$ _____ | 28) $4.75 \times 100 =$ _____ |
| 24) $9.18 \times 100 =$ _____ | 29) $84.6 \times 100 =$ _____ |
| 25) $10.9 \times 10 =$ _____ | 30) $1.83 \times 10 =$ _____ |

Addition revision

- | | |
|---------------------|----------------------|
| 31) $4 + 8 =$ _____ | 36) $10 + 9 =$ _____ |
| 32) $3 + 7 =$ _____ | 37) $4 + 7 =$ _____ |
| 33) $6 + 7 =$ _____ | 38) $10 + 4 =$ _____ |
| 34) $5 + 5 =$ _____ | 39) $5 + 4 =$ _____ |
| 35) $3 + 4 =$ _____ | 40) $5 + 9 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 41) $16 - 8 =$ _____ | 46) $16 - 7 =$ _____ |
| 42) $11 - 4 =$ _____ | 47) $12 - 7 =$ _____ |
| 43) $11 - 5 =$ _____ | 48) $13 - 8 =$ _____ |
| 44) $18 - 9 =$ _____ | 49) $16 - 9 =$ _____ |
| 45) $14 - 9 =$ _____ | 50) $17 - 8 =$ _____ |

Multiplication

- | | |
|--------------------------|--------------------------|
| 51) $9 \times 6 =$ _____ | 56) $6 \times 7 =$ _____ |
| 52) $9 \times 8 =$ _____ | 57) $5 \times 8 =$ _____ |
| 53) $7 \times 9 =$ _____ | 58) $8 \times 6 =$ _____ |
| 54) $6 \times 6 =$ _____ | 59) $6 \times 8 =$ _____ |
| 55) $7 \times 8 =$ _____ | 60) $8 \times 5 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 61) $56 \div 7 =$ _____ | 66) $35 \div 7 =$ _____ |
| 62) $45 \div 9 =$ _____ | 67) $72 \div 9 =$ _____ |
| 63) $60 \div 6 =$ _____ | 68) $64 \div 8 =$ _____ |
| 64) $36 \div 6 =$ _____ | 69) $81 \div 9 =$ _____ |
| 65) $48 \div 6 =$ _____ | 70) $42 \div 6 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying Larger Numbers x 50: 9 [A]


 x 10,100,1000
 ÷10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

 – Nr 100
 x5

 x 50,25
 Revision
Multiplying 2-digit numbers x 50

Multiplying by 50 is quite easy to do, seeing that it is one half of 100.

Multiplying by 50 can be done by multiplying by 100 then halving the result, or in the opposite order, halve the other number first, then multiply by 100.

For example, $62 \times 50 = (62 \times 100) \div 2 = 6200 \div 2 = 3100$

or: $62 \times 50 = (62 \div 2) \times 100 = 31 \times 100 = 3100$

2 digit numbers x 50

- | | | |
|----------------------------|----------------------------|----------------------------|
| 1) $24 \times 100 =$ _____ | 6) $49 \times 50 =$ _____ | 11) $76 \times 50 =$ _____ |
| 2) $24 \times 50 =$ _____ | 7) $73 \times 50 =$ _____ | 12) $27 \times 50 =$ _____ |
| 3) $52 \times 100 =$ _____ | 8) $90 \times 50 =$ _____ | 13) $41 \times 50 =$ _____ |
| 4) $52 \times 50 =$ _____ | 9) $42 \times 50 =$ _____ | 14) $93 \times 50 =$ _____ |
| 5) $72 \times 50 =$ _____ | 10) $74 \times 50 =$ _____ | 15) $78 \times 50 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 16) $110 \times 2 =$ _____ | 20) $702 \times 2 =$ _____ | 24) $672 \times 2 =$ _____ |
| 17) $793 \times 2 =$ _____ | 21) $203 \times 2 =$ _____ | 25) $407 \times 2 =$ _____ |
| 18) $595 \times 2 =$ _____ | 22) $136 \times 2 =$ _____ | 26) $785 \times 2 =$ _____ |
| 19) $401 \times 2 =$ _____ | 23) $307 \times 2 =$ _____ | 27) $238 \times 2 =$ _____ |

Addition revision

- | | |
|---------------------|----------------------|
| 28) $4 + 8 =$ _____ | 33) $10 + 9 =$ _____ |
| 29) $3 + 7 =$ _____ | 34) $4 + 7 =$ _____ |
| 30) $6 + 7 =$ _____ | 35) $10 + 4 =$ _____ |
| 31) $5 + 5 =$ _____ | 36) $5 + 4 =$ _____ |
| 32) $3 + 4 =$ _____ | 37) $5 + 9 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 38) $16 - 8 =$ _____ | 43) $16 - 7 =$ _____ |
| 39) $11 - 4 =$ _____ | 44) $12 - 7 =$ _____ |
| 40) $11 - 5 =$ _____ | 45) $13 - 8 =$ _____ |
| 41) $18 - 9 =$ _____ | 46) $16 - 9 =$ _____ |
| 42) $14 - 9 =$ _____ | 47) $17 - 8 =$ _____ |

Multiplication

- | | |
|---------------------------|---------------------------|
| 48) $5 \times 5 =$ _____ | 52) $10 \times 6 =$ _____ |
| 49) $9 \times 8 =$ _____ | 53) $10 \times 7 =$ _____ |
| 50) $10 \times 5 =$ _____ | 54) $9 \times 5 =$ _____ |
| 51) $9 \times 9 =$ _____ | 55) $6 \times 7 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 56) $64 \div 8 =$ _____ | 60) $35 \div 5 =$ _____ |
| 57) $50 \div 5 =$ _____ | 61) $60 \div 6 =$ _____ |
| 58) $40 \div 8 =$ _____ | 62) $49 \div 7 =$ _____ |
| 59) $80 \div 8 =$ _____ | 63) $25 \div 5 =$ _____ |

Time:

Score:

Multiplying Larger Numbers by 50: 9 [B]


 x 10,100,1000
 ÷10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

– Nr 100

 x5
 x 50,25
 Revision
2 digit numbers x 50

- | | | |
|---------------------------|----------------------------|----------------------------|
| 1) $64 \times 50 =$ _____ | 6) $43 \times 50 =$ _____ | 11) $91 \times 50 =$ _____ |
| 2) $24 \times 50 =$ _____ | 7) $75 \times 50 =$ _____ | 12) $42 \times 50 =$ _____ |
| 3) $86 \times 50 =$ _____ | 8) $26 \times 50 =$ _____ | 13) $28 \times 50 =$ _____ |
| 4) $29 \times 50 =$ _____ | 9) $57 \times 50 =$ _____ | 14) $88 \times 50 =$ _____ |
| 5) $41 \times 50 =$ _____ | 10) $80 \times 50 =$ _____ | 15) $33 \times 50 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 16) $803 \times 2 =$ _____ | 20) $508 \times 2 =$ _____ | 24) $285 \times 2 =$ _____ |
| 17) $373 \times 2 =$ _____ | 21) $330 \times 2 =$ _____ | 25) $510 \times 2 =$ _____ |
| 18) $121 \times 2 =$ _____ | 22) $521 \times 2 =$ _____ | 26) $492 \times 2 =$ _____ |
| 19) $921 \times 2 =$ _____ | 23) $503 \times 2 =$ _____ | 27) $338 \times 2 =$ _____ |

Add the nice numbers to find the sum (cross them off as you add them).

- | | |
|---------------------------------|---------------------------------|
| 28) $7 + 2 + 3 + 1 + 9 =$ _____ | 29) $6 + 1 + 5 + 4 + 2 =$ _____ |
| 30) $2 + 2 + 5 + 5 + 4 =$ _____ | 31) $3 + 8 + 6 + 8 + 8 =$ _____ |

Addition revision

- | | |
|----------------------|----------------------|
| 32) $10 + 4 =$ _____ | 36) $8 + 9 =$ _____ |
| 33) $8 + 5 =$ _____ | 37) $9 + 9 =$ _____ |
| 34) $6 + 7 =$ _____ | 38) $10 + 6 =$ _____ |
| 35) $7 + 7 =$ _____ | 39) $9 + 4 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 40) $13 - 5 =$ _____ | 44) $11 - 2 =$ _____ |
| 41) $9 - 4 =$ _____ | 45) $15 - 6 =$ _____ |
| 42) $14 - 6 =$ _____ | 46) $16 - 8 =$ _____ |
| 43) $15 - 7 =$ _____ | 47) $12 - 6 =$ _____ |

Multiplication

- | | |
|--------------------------|---------------------------|
| 48) $7 \times 7 =$ _____ | 53) $10 \times 5 =$ _____ |
| 49) $9 \times 6 =$ _____ | 54) $7 \times 6 =$ _____ |
| 50) $7 \times 8 =$ _____ | 55) $8 \times 7 =$ _____ |
| 51) $8 \times 6 =$ _____ | 56) $10 \times 6 =$ _____ |
| 52) $6 \times 7 =$ _____ | 57) $6 \times 5 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 58) $40 \div 8 =$ _____ | 63) $72 \div 8 =$ _____ |
| 59) $56 \div 8 =$ _____ | 64) $81 \div 9 =$ _____ |
| 60) $60 \div 6 =$ _____ | 65) $54 \div 6 =$ _____ |
| 61) $36 \div 6 =$ _____ | 66) $80 \div 8 =$ _____ |
| 62) $90 \div 9 =$ _____ | 67) $42 \div 6 =$ _____ |

Time:

Score:

Multiplying Larger Numbers by 25: 9 [C]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

 – Nr 100
 x5

 x 50,25
 Revision
Multiplying 2-digit numbers x 25

Multiplying by 25 is quite easy to do as well, seeing that it is one quarter or fourth of 100.

Multiplying by 25 can be done by multiplying by 100 then finding a quarter of the result, or in the opposite order, quarter the other number first, then multiply by 100.

For example, $84 \times 25 = (84 \times 100) \div 4 = 8400 \div 4 = 2100$

or: $84 \times 25 = (84 \div 4) \times 100 = 21 \times 100 = 2100$

2 digit numbers x 25

- | | | |
|---------------------------|----------------------------|----------------------------|
| 1) $44 \times 25 =$ _____ | 6) $84 \times 25 =$ _____ | 11) $72 \times 25 =$ _____ |
| 2) $32 \times 25 =$ _____ | 7) $24 \times 25 =$ _____ | 12) $60 \times 25 =$ _____ |
| 3) $24 \times 25 =$ _____ | 8) $80 \times 25 =$ _____ | 13) $96 \times 25 =$ _____ |
| 4) $48 \times 25 =$ _____ | 9) $48 \times 25 =$ _____ | 14) $32 \times 25 =$ _____ |
| 5) $36 \times 25 =$ _____ | 10) $64 \times 25 =$ _____ | 15) $68 \times 25 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 16) $711 \times 2 =$ _____ | 20) $473 \times 2 =$ _____ | 24) $898 \times 2 =$ _____ |
| 17) $207 \times 2 =$ _____ | 21) $294 \times 2 =$ _____ | 25) $674 \times 2 =$ _____ |
| 18) $267 \times 2 =$ _____ | 22) $618 \times 2 =$ _____ | 26) $597 \times 2 =$ _____ |
| 19) $200 \times 2 =$ _____ | 23) $359 \times 2 =$ _____ | 27) $254 \times 2 =$ _____ |

Addition revision

- | | |
|---------------------|----------------------|
| 28) $7 + 6 =$ _____ | 33) $6 + 8 =$ _____ |
| 29) $5 + 5 =$ _____ | 34) $10 + 6 =$ _____ |
| 30) $6 + 6 =$ _____ | 35) $4 + 8 =$ _____ |
| 31) $5 + 8 =$ _____ | 36) $7 + 7 =$ _____ |
| 32) $8 + 4 =$ _____ | 37) $6 + 5 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 38) $11 - 3 =$ _____ | 43) $16 - 9 =$ _____ |
| 39) $15 - 7 =$ _____ | 44) $18 - 9 =$ _____ |
| 40) $13 - 4 =$ _____ | 45) $8 - 3 =$ _____ |
| 41) $13 - 5 =$ _____ | 46) $15 - 8 =$ _____ |
| 42) $15 - 6 =$ _____ | 47) $12 - 3 =$ _____ |

Multiplication

- | | |
|--------------------------|---------------------------|
| 48) $6 \times 7 =$ _____ | 52) $9 \times 7 =$ _____ |
| 49) $5 \times 9 =$ _____ | 53) $8 \times 5 =$ _____ |
| 50) $8 \times 8 =$ _____ | 54) $8 \times 7 =$ _____ |
| 51) $5 \times 8 =$ _____ | 55) $10 \times 5 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 56) $90 \div 9 =$ _____ | 60) $63 \div 7 =$ _____ |
| 57) $36 \div 6 =$ _____ | 61) $54 \div 9 =$ _____ |
| 58) $40 \div 8 =$ _____ | 62) $72 \div 8 =$ _____ |
| 59) $35 \div 5 =$ _____ | 63) $54 \div 6 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying Larger Numbers by 25: 9 [D]


 x 10,100,1000
 ÷10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

- Nr 100

 x5
 Revision
2 digit numbers x 25

- 1) $28 \times 25 =$ _____ 4) $64 \times 25 =$ _____ 7) $48 \times 25 =$ _____
 2) $68 \times 25 =$ _____ 5) $44 \times 25 =$ _____ 8) $28 \times 25 =$ _____
 3) $56 \times 25 =$ _____ 6) $28 \times 25 =$ _____ 9) $40 \times 25 =$ _____

2 digit numbers x 50

- 10) $82 \times 50 =$ _____ 13) $50 \times 50 =$ _____ 16) $80 \times 50 =$ _____
 11) $88 \times 50 =$ _____ 14) $25 \times 50 =$ _____ 17) $47 \times 50 =$ _____
 12) $67 \times 50 =$ _____ 15) $48 \times 50 =$ _____ 18) $84 \times 50 =$ _____

Add the "nice" numbers to find the sum (cross them off as you add them).

- 19) $7 + 1 + 2 + 2 + 6 + 2 =$ _____ 23) $5 + 3 + 7 + 9 + 1 + 8 =$ _____
 20) $3 + 3 + 3 + 8 + 8 + 6 =$ _____ 24) $9 + 9 + 4 + 7 + 9 + 7 =$ _____
 21) $9 + 6 + 3 + 9 + 9 + 2 =$ _____ 25) $1 + 2 + 1 + 7 + 6 + 6 =$ _____
 22) $3 + 3 + 6 + 7 + 7 + 9 =$ _____ 26) $1 + 1 + 5 + 7 + 5 + 5 =$ _____

Addition revision

- 27) $9 + 6 =$ _____ 32) $3 + 9 =$ _____
 28) $6 + 7 =$ _____ 33) $4 + 6 =$ _____
 29) $6 + 9 =$ _____ 34) $7 + 9 =$ _____
 30) $8 + 5 =$ _____ 35) $4 + 8 =$ _____
 31) $8 + 6 =$ _____ 36) $6 + 6 =$ _____

Subtraction revision

- 37) $12 - 5 =$ _____ 42) $17 - 9 =$ _____
 38) $15 - 8 =$ _____ 43) $14 - 6 =$ _____
 39) $15 - 7 =$ _____ 44) $11 - 6 =$ _____
 40) $12 - 6 =$ _____ 45) $16 - 7 =$ _____
 41) $14 - 7 =$ _____ 46) $16 - 8 =$ _____

Multiplication

- 47) $6 \times 7 =$ _____ 51) $9 \times 5 =$ _____
 48) $10 \times 7 =$ _____ 52) $5 \times 8 =$ _____
 49) $9 \times 7 =$ _____ 53) $5 \times 7 =$ _____
 50) $7 \times 6 =$ _____ 54) $10 \times 5 =$ _____

Division

- 55) $60 \div 6 =$ _____ 59) $64 \div 8 =$ _____
 56) $48 \div 6 =$ _____ 60) $40 \div 5 =$ _____
 57) $56 \div 7 =$ _____ 61) $40 \div 8 =$ _____
 58) $81 \div 9 =$ _____ 62) $42 \div 7 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Revision: 10 [A]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

– Nr 100

 x 50,25
 x5

Revision

Multiply these numbers including decimals

1) $426 \times 1,000 =$ _____

6) $975 \times 1,000 =$ _____

2) $660 \times 10 =$ _____

7) $0.509 \times 10 =$ _____

3) $0.4 \times 100 =$ _____

8) $95.8 \times 100 =$ _____

4) $8.59 \times 100 =$ _____

9) $0.604 \times 100 =$ _____

5) $2.00 \times 1,000 =$ _____

10) $325 \times 1,000 =$ _____

2 digit numbers x 25

11) $82 \times 25 =$ _____

14) $28 \times 25 =$ _____

17) $64 \times 25 =$ _____

12) $60 \times 25 =$ _____

15) $44 \times 25 =$ _____

18) $96 \times 25 =$ _____

13) $72 \times 25 =$ _____

16) $40 \times 25 =$ _____

19) $68 \times 25 =$ _____

2 digit numbers x 50

20) $25 \times 50 =$ _____

23) $76 \times 50 =$ _____

26) $92 \times 50 =$ _____

21) $41 \times 50 =$ _____

24) $78 \times 50 =$ _____

27) $49 \times 50 =$ _____

22) $46 \times 50 =$ _____

25) $74 \times 50 =$ _____

28) $33 \times 50 =$ _____

Add the nice numbers to find the sum (cross them off as you add them).

29) $7 + 6 + 5 + 6 + 9 + 5 =$ _____

33) $3 + 7 + 3 + 4 + 2 + 8 =$ _____

30) $5 + 2 + 4 + 1 + 1 + 7 =$ _____

34) $4 + 3 + 8 + 4 + 2 + 2 =$ _____

31) $3 + 5 + 6 + 2 + 3 + 6 =$ _____

35) $5 + 6 + 3 + 5 + 8 + 9 =$ _____

32) $3 + 7 + 7 + 5 + 8 + 4 =$ _____

36) $2 + 7 + 6 + 9 + 8 + 3 =$ _____

Addition revision

37) $4 + 5 =$ _____

41) $4 + 4 =$ _____

38) $3 + 4 =$ _____

42) $8 + 4 =$ _____

39) $4 + 9 =$ _____

43) $5 + 8 =$ _____

40) $10 + 7 =$ _____

44) $7 + 7 =$ _____

Subtraction revision

45) $10 - 2 =$ _____

49) $10 - 5 =$ _____

46) $14 - 6 =$ _____

50) $8 - 2 =$ _____

47) $18 - 9 =$ _____

51) $15 - 7 =$ _____

48) $17 - 8 =$ _____

52) $17 - 9 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Revision: 10 [B]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

– Nr 100

 x 50,25
 x5

Revision

Addition near 100

- 1) $28 + 98 =$ _____ 6) $41 + 93 =$ _____ 11) $21 + 104 =$ _____
 2) $30 + 101 =$ _____ 7) $39 + 96 =$ _____ 12) $36 + 103 =$ _____
 3) $42 + 102 =$ _____ 8) $19 + 95 =$ _____ 13) $20 + 106 =$ _____
 4) $21 + 93 =$ _____ 9) $12 + 92 =$ _____ 14) $31 + 107 =$ _____
 5) $36 + 104 =$ _____ 10) $12 + 93 =$ _____ 15) $20 + 97 =$ _____

Multiply these numbers including decimals

- 16) $89.2 \times 10 =$ _____ 21) $456 \times 10 =$ _____
 17) $51.0 \times 100 =$ _____ 22) $69.9 \times 100 =$ _____
 18) $927 \times 1,000 =$ _____ 23) $62.8 \times 1,000 =$ _____
 19) $539 \times 1,000 =$ _____ 24) $123 \times 1,000 =$ _____
 20) $116 \times 10 =$ _____ 25) $0.656 \times 10 =$ _____

2 digit numbers x 25

- 26) $60 \times 25 =$ _____ 29) $32 \times 25 =$ _____ 32) $60 \times 25 =$ _____
 27) $24 \times 25 =$ _____ 30) $24 \times 25 =$ _____ 33) $48 \times 25 =$ _____
 28) $96 \times 25 =$ _____ 31) $52 \times 25 =$ _____ 34) $72 \times 25 =$ _____

2 digit numbers x 50

- 35) $83 \times 50 =$ _____ 38) $25 \times 50 =$ _____ 41) $81 \times 50 =$ _____
 36) $92 \times 50 =$ _____ 39) $68 \times 50 =$ _____ 42) $95 \times 50 =$ _____
 37) $97 \times 50 =$ _____ 40) $89 \times 50 =$ _____ 43) $49 \times 50 =$ _____

Add the nice numbers to find the sum (cross them off as you add them).

- 44) $4 + 3 + 8 + 3 + 5 + 7 =$ _____ 47) $3 + 6 + 6 + 7 + 7 + 2 =$ _____
 45) $3 + 3 + 5 + 6 + 8 + 4 =$ _____ 48) $4 + 6 + 2 + 9 + 4 + 5 =$ _____
 46) $2 + 8 + 2 + 3 + 9 + 9 =$ _____ 49) $8 + 3 + 8 + 8 + 8 + 5 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Revision: 10 [C]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	– Nr 100	x 50,25	Revision
-------------------------------	---------------------------	--------------------------	----------	---------	----------

Divide these numbers

- | | |
|-------------------------------|-----------------------------|
| 1) $7,984 \div 10 =$ _____ | 6) $77.8 \div 100 =$ _____ |
| 2) $6,860 \div 1,000 =$ _____ | 7) $834 \div 1,000 =$ _____ |
| 3) $878 \div 100 =$ _____ | 8) $24.3 \div 100 =$ _____ |
| 4) $82.24 \div 10 =$ _____ | 9) $8.06 \div 10 =$ _____ |
| 5) $20.47 \div 10 =$ _____ | 10) $23.6 \div 100 =$ _____ |

Addition near 100

- | | | |
|------------------------|------------------------|------------------------|
| 11) $102 + 40 =$ _____ | 16) $100 + 15 =$ _____ | 21) $101 + 29 =$ _____ |
| 12) $106 + 34 =$ _____ | 17) $96 + 39 =$ _____ | 22) $90 + 24 =$ _____ |
| 13) $90 + 30 =$ _____ | 18) $96 + 44 =$ _____ | 23) $100 + 44 =$ _____ |
| 14) $102 + 29 =$ _____ | 19) $104 + 14 =$ _____ | 24) $105 + 44 =$ _____ |
| 15) $103 + 16 =$ _____ | 20) $102 + 11 =$ _____ | 25) $104 + 37 =$ _____ |

Add the nice numbers to find the sum (cross them off as you add them).

- | | |
|-------------------------------------|-------------------------------------|
| 26) $8 + 5 + 2 + 2 + 7 + 3 =$ _____ | 30) $5 + 9 + 4 + 3 + 1 + 5 =$ _____ |
| 27) $8 + 6 + 5 + 3 + 1 + 6 =$ _____ | 31) $6 + 6 + 4 + 7 + 4 + 4 =$ _____ |
| 28) $5 + 2 + 6 + 9 + 7 + 4 =$ _____ | 32) $7 + 9 + 7 + 5 + 4 + 8 =$ _____ |
| 29) $2 + 3 + 1 + 3 + 2 + 7 =$ _____ | 33) $7 + 3 + 8 + 4 + 9 + 6 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 34) $875 \times 2 =$ _____ | 36) $845 \times 2 =$ _____ | 38) $353 \times 2 =$ _____ |
| 35) $835 \times 2 =$ _____ | 37) $557 \times 2 =$ _____ | 39) $686 \times 2 =$ _____ |

Addition revision

- | | |
|---------------------|---------------------|
| 40) $3 + 5 =$ _____ | 43) $6 + 6 =$ _____ |
| 41) $6 + 7 =$ _____ | 44) $4 + 9 =$ _____ |
| 42) $3 + 6 =$ _____ | 45) $4 + 4 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 46) $11 - 5 =$ _____ | 49) $14 - 6 =$ _____ |
| 47) $12 - 4 =$ _____ | 50) $16 - 9 =$ _____ |
| 48) $10 - 3 =$ _____ | 51) $13 - 8 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Revision: 10 [D]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

– Nr 100

 x 50,25
 x5

Revision

Addition near 100

- 1) $33 + 96 =$ _____ 6) $26 + 95 =$ _____ 11) $14 + 108 =$ _____
 2) $34 + 108 =$ _____ 7) $18 + 107 =$ _____ 12) $11 + 101 =$ _____
 3) $38 + 96 =$ _____ 8) $20 + 96 =$ _____ 13) $43 + 107 =$ _____
 4) $26 + 102 =$ _____ 9) $32 + 96 =$ _____ 14) $25 + 106 =$ _____
 5) $29 + 107 =$ _____ 10) $31 + 101 =$ _____ 15) $39 + 101 =$ _____

Multiply these numbers including decimals

- 16) $5.78 \times 1,000 =$ _____ 21) $5.19 \times 1,000 =$ _____
 17) $2.00 \times 10 =$ _____ 22) $0.291 \times 10 =$ _____
 18) $39.9 \times 100 =$ _____ 23) $955 \times 100 =$ _____
 19) $29.6 \times 100 =$ _____ 24) $280 \times 100 =$ _____
 20) $24.7 \times 10 =$ _____ 25) $3.67 \times 10 =$ _____

2 digit numbers x 25

- 26) $64 \times 25 =$ _____ 29) $32 \times 25 =$ _____ 32) $82 \times 25 =$ _____
 27) $36 \times 25 =$ _____ 30) $28 \times 25 =$ _____ 33) $60 \times 25 =$ _____
 28) $52 \times 25 =$ _____ 31) $20 \times 25 =$ _____ 34) $16 \times 25 =$ _____

2 digit numbers x 50

- 35) $81 \times 50 =$ _____ 38) $52 \times 50 =$ _____ 41) $57 \times 50 =$ _____
 36) $53 \times 50 =$ _____ 39) $98 \times 50 =$ _____ 42) $79 \times 50 =$ _____
 37) $74 \times 50 =$ _____ 40) $26 \times 50 =$ _____ 43) $31 \times 50 =$ _____

Add the nice numbers to find the sum (cross them off as you add them).

- 44) $8 + 6 + 1 + 6 + 7 + 7 =$ _____ 47) $5 + 8 + 3 + 2 + 1 + 6 =$ _____
 45) $1 + 4 + 8 + 2 + 5 + 8 =$ _____ 48) $5 + 2 + 8 + 7 + 7 + 4 =$ _____
 46) $1 + 7 + 9 + 4 + 7 + 5 =$ _____ 49) $1 + 5 + 6 + 4 + 6 + 6 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Checkup Worksheets

Checkup Worksheets

Checkup Worksheets are designed for assessment of students' learning at intervals of two or three weeks.

Note: **Answer keys** for all worksheets are in the Answer Keys Section of this eBook.

Time:

Score:

Check Up A



$\times 10, 100, 1000$	Doubling Lg	Nice Numbers	– Nr 100	$\times 50, 25$
$\div 10, 100, 1000$	Halving Lg	+ Nr 100	$\times 5$	Revision

 $\times 10, \times 100, \times 1,000$

- | | |
|--------------------------------|---------------------------------|
| 1) $73.8 \times 1,000 =$ _____ | 7) $0.793 \times 1,000 =$ _____ |
| 2) $5.65 \times 100 =$ _____ | 8) $4.88 \times 100 =$ _____ |
| 3) $702 \times 10 =$ _____ | 9) $65.0 \times 10 =$ _____ |
| 4) $79 \times 1,000 =$ _____ | 10) $1.80 \times 10 =$ _____ |
| 5) $27.3 \times 10 =$ _____ | 11) $103 \times 1,000 =$ _____ |
| 6) $41.9 \times 1,000 =$ _____ | 12) $373 \times 100 =$ _____ |

 $\div 10, \div 100, \div 1000$

- | | |
|--------------------------------|---------------------------------|
| 13) $6,831 \div 1,000 =$ _____ | 19) $56,392 \div 1,000 =$ _____ |
| 14) $5 \div 100 =$ _____ | 20) $2,186 \div 10 =$ _____ |
| 15) $8,077 \div 10 =$ _____ | 21) $1,400 \div 100 =$ _____ |
| 16) $205 \div 1,000 =$ _____ | 22) $62,002 \div 1,000 =$ _____ |
| 17) $70 \div 1,000 =$ _____ | 23) $10,185 \div 10 =$ _____ |
| 18) $5,008 \div 100 =$ _____ | 24) $15,009 \div 100 =$ _____ |

Addition revision

- | | |
|---------------------|---------------------|
| 25) $4 + 9 =$ _____ | 30) $5 + 7 =$ _____ |
| 26) $7 + 4 =$ _____ | 31) $8 + 6 =$ _____ |
| 27) $5 + 8 =$ _____ | 32) $7 + 9 =$ _____ |
| 28) $7 + 5 =$ _____ | 33) $6 + 8 =$ _____ |
| 29) $6 + 5 =$ _____ | 34) $9 + 7 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 45) $16 - 8 =$ _____ | 50) $11 - 2 =$ _____ |
| 46) $16 - 9 =$ _____ | 51) $14 - 5 =$ _____ |
| 47) $17 - 8 =$ _____ | 52) $14 - 8 =$ _____ |
| 48) $13 - 8 =$ _____ | 53) $9 - 2 =$ _____ |
| 49) $13 - 7 =$ _____ | 54) $11 - 5 =$ _____ |

Multiplication revision

- | | |
|---------------------------|--------------------------|
| 35) $7 \times 4 =$ _____ | 40) $8 \times 8 =$ _____ |
| 36) $8 \times 9 =$ _____ | 41) $4 \times 6 =$ _____ |
| 37) $9 \times 9 =$ _____ | 42) $6 \times 6 =$ _____ |
| 38) $10 \times 7 =$ _____ | 43) $9 \times 8 =$ _____ |
| 39) $5 \times 8 =$ _____ | 44) $5 \times 6 =$ _____ |

Division revision

- | | |
|-------------------------|-------------------------|
| 55) $30 \div 6 =$ _____ | 60) $54 \div 6 =$ _____ |
| 56) $40 \div 8 =$ _____ | 61) $42 \div 7 =$ _____ |
| 57) $72 \div 8 =$ _____ | 62) $72 \div 9 =$ _____ |
| 58) $32 \div 4 =$ _____ | 63) $24 \div 3 =$ _____ |
| 59) $30 \div 5 =$ _____ | 64) $35 \div 7 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 2D worksheet. The teacher should record each student's score and the time taken.

Time:

Score:

Check Up B



$\times 10, 100, 1000$	Doubling Lg	Nice Numbers	$- \text{Nr } 100$	$\times 50, 25$
$\div 10, 100, 1000$	Halving Lg	$+ \text{Nr } 100$	$\times 5$	Revision

Double these numbers

- 1) $43 \times 2 =$ _____ 6) $49 \times 2 =$ _____ 11) $168 \times 2 =$ _____
 2) $24 \times 2 =$ _____ 7) $27 \times 2 =$ _____ 12) $330 \times 2 =$ _____
 3) $341 \times 2 =$ _____ 8) $486 \times 2 =$ _____ 13) $355 \times 2 =$ _____
 4) $253 \times 2 =$ _____ 9) $164 \times 2 =$ _____ 14) $657 \times 2 =$ _____
 5) $624 \times 2 =$ _____ 10) $925 \times 2 =$ _____ 15) $867 \times 2 =$ _____

Halve these numbers

- 16) $42 \div 2 =$ _____ 17) $500 \div 2 =$ _____ 26) $740 \div 2 =$ _____ 27) $148 \div 2 =$ _____
 18) $56 \div 2 =$ _____ 19) $450 \div 2 =$ _____ 28) $314 \div 2 =$ _____ 29) $704 \div 2 =$ _____
 20) $48 \div 2 =$ _____ 21) $326 \div 2 =$ _____ 30) $674 \div 2 =$ _____ 31) $726 \div 2 =$ _____
 22) $30 \div 2 =$ _____ 23) $842 \div 2 =$ _____ 32) $948 \div 2 =$ _____ 33) $970 \div 2 =$ _____
 24) $38 \div 2 =$ _____ 25) $184 \div 2 =$ _____ 34) $870 \div 2 =$ _____ 35) $956 \div 2 =$ _____

 $\times 10, \times 100$ or $\times 1000$, including decimals

- 36) $4.08 \times 100 =$ _____
 37) $34 \times 100 =$ _____
 38) $8.70 \times 1,000 =$ _____
 39) $40.2 \times 10 =$ _____
 40) $0.75 \times 1,000 =$ _____

Divide these numbers

- 41) $2,391 \div 10 =$ _____
 42) $7,796 \div 100 =$ _____
 43) $146.1 \div 100 =$ _____
 44) $1,171 \div 1,000 =$ _____
 45) $1,548 \div 10 =$ _____

Addition revision

- 46) $6 + 6 =$ _____ 51) $7 + 5 =$ _____
 47) $4 + 6 =$ _____ 52) $3 + 8 =$ _____
 48) $4 + 5 =$ _____ 53) $3 + 4 =$ _____
 49) $7 + 4 =$ _____ 54) $9 + 9 =$ _____
 50) $9 + 7 =$ _____ 55) $4 + 7 =$ _____

Subtraction revision

- 56) $14 - 6 =$ _____ 61) $16 - 9 =$ _____
 57) $17 - 9 =$ _____ 62) $12 - 7 =$ _____
 58) $13 - 6 =$ _____ 63) $15 - 6 =$ _____
 59) $16 - 8 =$ _____ 64) $16 - 7 =$ _____
 60) $9 - 0 =$ _____ 65) $13 - 8 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 4D worksheet. The teacher should record each student's score and the time taken.

Time:

Score:

Check Up C


 x 10,100,1000
 ÷10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

- Nr 100

 x5
 x 50,25
 Revision

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|------------------------------------|-------------------------------------|
| 1) $8 + 2 + 2 + 3 + 8 + 2 =$ _____ | 6) $5 + 2 + 1 + 9 + 6 + 4 =$ _____ |
| 2) $8 + 8 + 8 + 6 + 8 + 1 =$ _____ | 7) $6 + 3 + 9 + 9 + 6 + 4 =$ _____ |
| 3) $8 + 1 + 4 + 8 + 3 + 4 =$ _____ | 8) $7 + 6 + 1 + 7 + 4 + 3 =$ _____ |
| 4) $4 + 7 + 2 + 1 + 2 + 8 =$ _____ | 9) $5 + 3 + 2 + 2 + 8 + 5 =$ _____ |
| 5) $8 + 8 + 8 + 5 + 1 + 2 =$ _____ | 10) $4 + 8 + 6 + 2 + 2 + 8 =$ _____ |

Addition near 100

- | | | |
|------------------------|------------------------|------------------------|
| 11) $94 + 35 =$ _____ | 16) $108 + 41 =$ _____ | 21) $101 + 37 =$ _____ |
| 12) $96 + 18 =$ _____ | 17) $102 + 35 =$ _____ | 22) $95 + 31 =$ _____ |
| 13) $106 + 21 =$ _____ | 18) $97 + 14 =$ _____ | 23) $99 + 30 =$ _____ |
| 14) $101 + 33 =$ _____ | 19) $104 + 44 =$ _____ | 24) $98 + 38 =$ _____ |
| 15) $92 + 18 =$ _____ | 20) $103 + 31 =$ _____ | 25) $96 + 24 =$ _____ |

x10, x100 or x1000, including decimals

- 26) $6.568 \times 100 =$ _____
- 27) $0.95 \times 1,000 =$ _____
- 28) $507 \times 1,000 =$ _____
- 29) $6,002 \times 100 =$ _____
- 30) $92.4 \times 1,000 =$ _____

÷10, ÷100 or ÷1000, including decimals

- 31) $50.6 \div 100 =$ _____
- 32) $6,036 \div 1,000 =$ _____
- 33) $8,502 \div 10 =$ _____
- 34) $0.05 \div 10 =$ _____
- 35) $2,108 \div 10 =$ _____

Double these numbers

- 36) $24 \times 2 =$ _____
- 37) $38 \times 2 =$ _____
- 38) $402 \times 2 =$ _____
- 39) $827 \times 2 =$ _____
- 40) $379 \times 2 =$ _____

Halve these numbers

- 41) $62 \div 2 =$ _____
- 42) $428 \div 2 =$ _____
- 43) $836 \div 2 =$ _____
- 44) $504 \div 2 =$ _____
- 45) $972 \div 2 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 6D worksheet. The teacher should record each student's score and the time taken.

Time:

Score:

Check Up D



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x 50,25 x5	Revision
-------------------------------	---------------------------	--------------------------	----------	---------------	----------

Subtraction near 100

- | | | |
|------------------------|-------------------------|-------------------------|
| 1) $237 - 94 =$ _____ | 6) $234 - 98 =$ _____ | 11) $118 - 98 =$ _____ |
| 2) $146 - 105 =$ _____ | 7) $133 - 101 =$ _____ | 12) $623 - 107 =$ _____ |
| 3) $135 - 102 =$ _____ | 8) $321 - 97 =$ _____ | 13) $138 - 106 =$ _____ |
| 4) $113 - 106 =$ _____ | 9) $533 - 102 =$ _____ | 14) $119 - 95 =$ _____ |
| 5) $123 - 104 =$ _____ | 10) $120 - 101 =$ _____ | 15) $129 - 98 =$ _____ |

2-digit numbers x 5

- | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|
| 16) $42 \times 5 =$ _____ | 21) $96 \times 5 =$ _____ | 26) $82 \times 5 =$ _____ | 31) $68 \times 5 =$ _____ |
| 17) $28 \times 5 =$ _____ | 22) $22 \times 5 =$ _____ | 27) $48 \times 5 =$ _____ | 32) $81 \times 5 =$ _____ |
| 18) $36 \times 5 =$ _____ | 23) $56 \times 5 =$ _____ | 28) $26 \times 5 =$ _____ | 33) $38 \times 5 =$ _____ |
| 19) $83 \times 5 =$ _____ | 24) $47 \times 5 =$ _____ | 29) $58 \times 5 =$ _____ | 34) $56 \times 5 =$ _____ |
| 20) $41 \times 5 =$ _____ | 25) $62 \times 5 =$ _____ | 30) $72 \times 5 =$ _____ | 35) $71 \times 5 =$ _____ |

Addition near 100

- 36) $99 + 44 =$ _____
- 37) $103 + 29 =$ _____
- 38) $108 + 35 =$ _____
- 39) $95 + 25 =$ _____
- 40) $98 + 21 =$ _____

Add the "nice" numbers to find the sum

- 41) $9 + 2 + 3 + 1 + 1 + 2 =$ _____
- 42) $5 + 7 + 8 + 2 + 8 + 4 =$ _____
- 43) $9 + 9 + 9 + 6 + 4 + 9 =$ _____
- 44) $5 + 4 + 6 + 4 + 6 + 8 =$ _____

x10, x100 or x1000, including decimals

- 45) $5.508 \times 100 =$ _____
- 46) $72.4 \times 1,000 =$ _____
- 47) $0.35 \times 1,000 =$ _____
- 48) $407 \times 1,000 =$ _____
- 49) $8,005 \times 100 =$ _____

÷10, ÷100 or ÷1000, including decimals

- 50) $30.6 \div 100 =$ _____
- 51) $8,036 \div 1,000 =$ _____
- 52) $0.08 \div 10 =$ _____
- 53) $0.7 \div 10 =$ _____
- 54) $600 \div 1,000 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 6D worksheet. The teacher should record each student's score and the time taken.

Time:

Score:

Check Up E



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x 50,25 Revision
-------------------------------	---------------------------	--------------------------	----------	---------------------

2 digit numbers x 50

- 1) $42 \times 50 =$ _____ 4) $80 \times 50 =$ _____ 7) $88 \times 50 =$ _____
 2) $82 \times 50 =$ _____ 5) $64 \times 50 =$ _____ 8) $38 \times 50 =$ _____
 3) $50 \times 50 =$ _____ 6) $67 \times 50 =$ _____ 9) $25 \times 50 =$ _____

2 digit numbers x 25

- 10) $40 \times 25 =$ _____ 13) $28 \times 25 =$ _____ 16) $68 \times 25 =$ _____
 11) $84 \times 25 =$ _____ 14) $42 \times 25 =$ _____ 17) $92 \times 25 =$ _____
 12) $32 \times 25 =$ _____ 15) $56 \times 25 =$ _____ 18) $80 \times 25 =$ _____

Addition near 100

- 19) $99 + 44 =$ _____
 20) $103 + 29 =$ _____
 21) $108 + 35 =$ _____
 22) $95 + 25 =$ _____
 23) $98 + 21 =$ _____

Subtraction near 100

- 24) $140 - 94 =$ _____
 25) $116 - 96 =$ _____
 26) $119 - 103 =$ _____
 27) $136 - 96 =$ _____
 28) $251 - 103 =$ _____

Add the "nice" numbers to find the sum (cross them off as you add them).

- 29) $2 + 9 + 4 + 1 + 8 + 5 =$ _____ 32) $6 + 2 + 5 + 2 + 2 + 8 =$ _____
 30) $4 + 8 + 3 + 8 + 4 + 1 =$ _____ 33) $8 + 3 + 2 + 3 + 3 + 1 =$ _____
 31) $6 + 6 + 6 + 6 + 3 + 5 =$ _____ 34) $8 + 4 + 5 + 3 + 5 + 5 =$ _____

x10, x100 or x1000, including decimals

- 35) $42.7 \times 100 =$ _____
 36) $6.63 \times 1,000 =$ _____
 37) $89.003 \times 10 =$ _____

÷10, ÷100 or ÷1000, including decimals

- 38) $8,521 \div 10 =$ _____
 39) $9,757 \div 10 =$ _____
 40) $6,073 \div 10 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 10D worksheet. The teacher should record each student's score and the time taken.

Homework Sheets

Homework Sheets

Homework Sheets are designed to be sent home at regular intervals for home-based revision of arithmetic facts. Each sheet includes information for parents to briefly explain the learning strategy being adopted in the classroom, so that parents can offer help to their children that is consistent with what is taught at school.

Suggested Uses:

1. Use homework sheets for reinforcement of learning in class, by sending matching homework sheets home as each strategy is covered in class.
2. Introduce the program of developing fluency in arithmetic facts at a parent evening, open day, or parent-teacher interview, for example. Use the occasion to explain to parents the strategies being adopted in your classroom, and invite parents to assist their child to learn by following the Advice to Parents on each homework sheet.

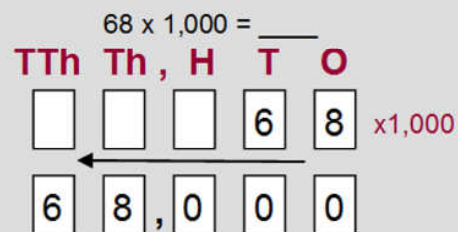
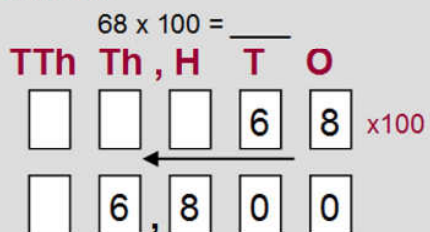
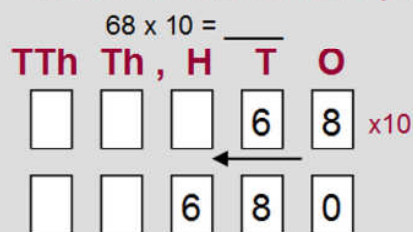
Note: **Answer keys** for all worksheets are in the Answer Keys Section of this eBook.



Information for Parents: Multiplying by 10, 100 or 1,000

To x10, x100, x1,000: Use a number slide.

- x10 move the numbers 1 place. The number is getting bigger, so move each digit to the left.
- x100 move the numbers 2 places to the left.
- x1,000 move the numbers 3 places to the left.



Note to parents: It is not recommended to talk of "adding zeroes", since this is not an accurate description of the process. Also it causes problems when numbers with decimals are multiplied. Rather, talk about moving the digits to new locations to make the number bigger by a power of ten.

x 10, x 100, x 1,000

- 1) $64 \times 1,000 =$ _____
- 2) $21 \times 10 =$ _____
- 3) $70 \times 10 =$ _____
- 4) $31 \times 1,000 =$ _____
- 5) $20 \times 100 =$ _____
- 6) $5 \times 1,000 =$ _____
- 7) $65 \times 10 =$ _____
- 8) $28 \times 100 =$ _____
- 9) $41 \times 100 =$ _____
- 10) $78 \times 10 =$ _____

- 11) $36 \times 10 =$ _____
- 12) $31 \times 100 =$ _____
- 13) $96 \times 1,000 =$ _____
- 14) $97 \times 1,000 =$ _____
- 15) $47 \times 100 =$ _____
- 16) $3 \times 1,000 =$ _____
- 17) $76 \times 1,000 =$ _____
- 18) $82 \times 100 =$ _____
- 19) $89 \times 100 =$ _____
- 20) $75 \times 1,000 =$ _____

Addition revision

- 21) $10 + 7 =$ _____
- 22) $8 + 4 =$ _____
- 23) $3 + 9 =$ _____
- 24) $4 + 6 =$ _____
- 25) $3 + 8 =$ _____
- 26) $9 + 5 =$ _____
- 27) $8 + 8 =$ _____
- 28) $8 + 5 =$ _____

Subtraction revision

- 29) $17 - 8 =$ _____
- 30) $14 - 6 =$ _____
- 31) $16 - 8 =$ _____
- 32) $13 - 8 =$ _____
- 33) $8 - 3 =$ _____
- 34) $12 - 7 =$ _____
- 35) $15 - 7 =$ _____
- 36) $10 - 5 =$ _____



x 10,100,1000

÷10,100,1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

- Nr 100

x5

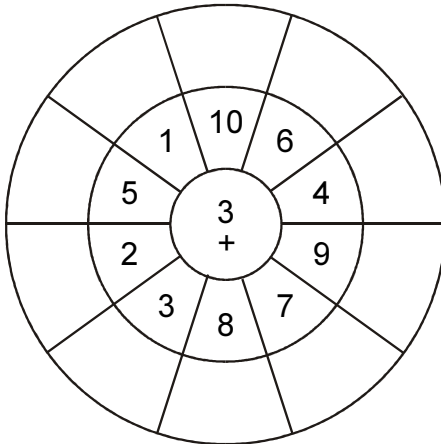
x 50,25

Revision

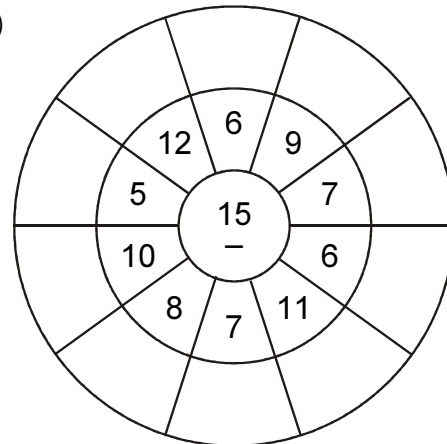
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

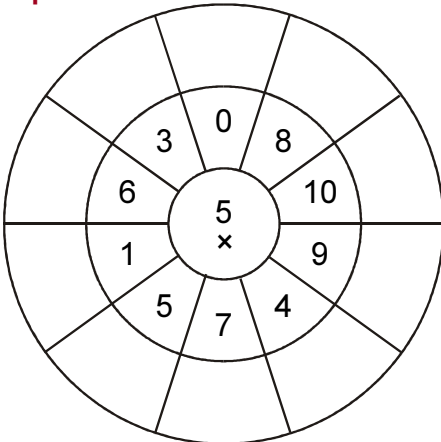
1)

**Subtraction**

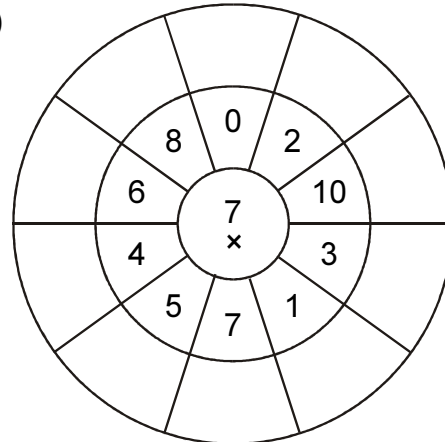
2)

**Multiplication**

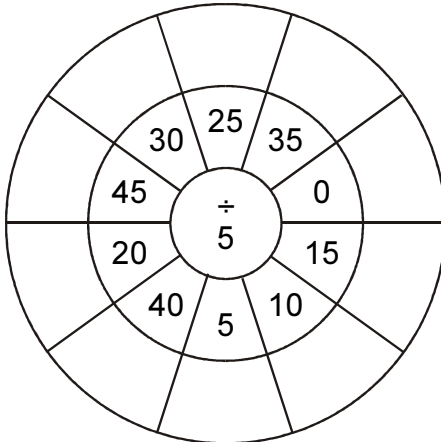
3)



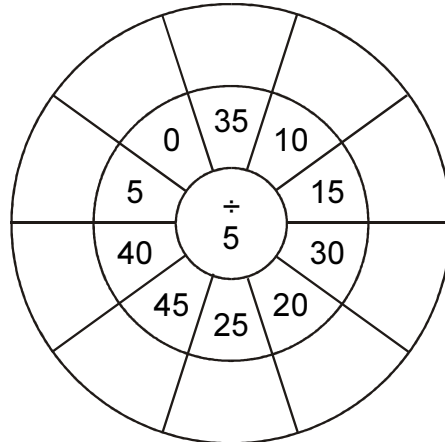
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000

Doubling Lg

Nice Numbers

- Nr 100

x 50,25

÷10,100,1000

Halving Lg

+ Nr 100

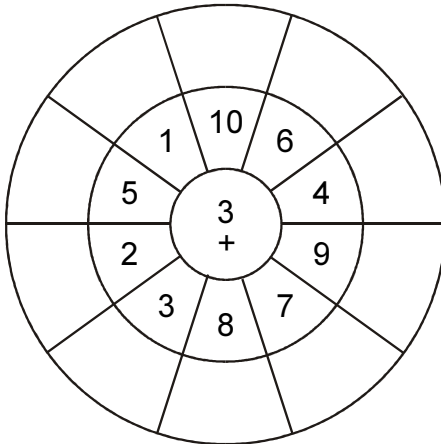
x5

Revision

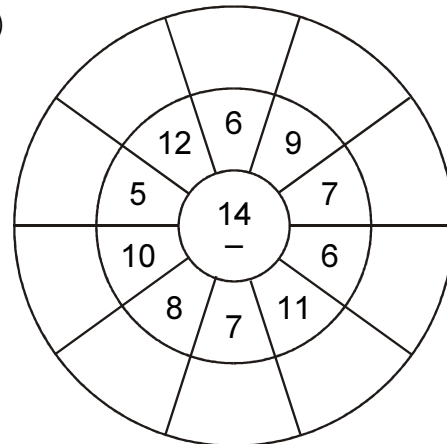
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

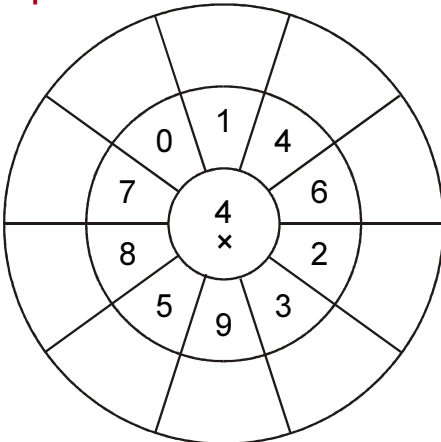
1)

**Subtraction**

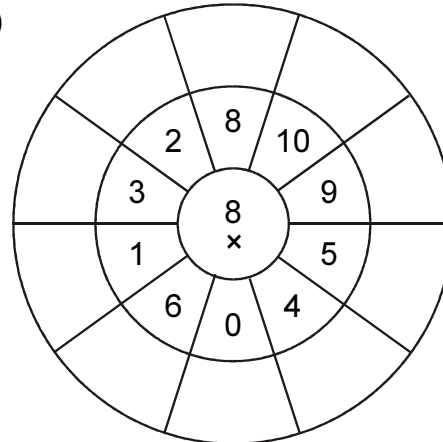
2)

**Multiplication**

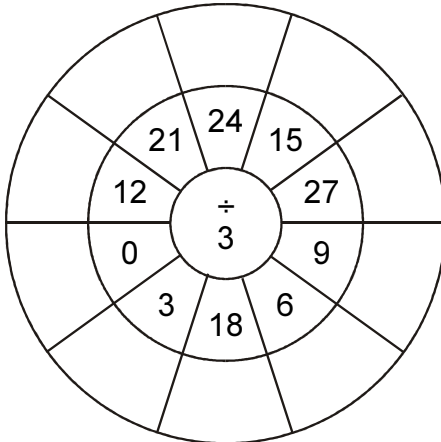
3)



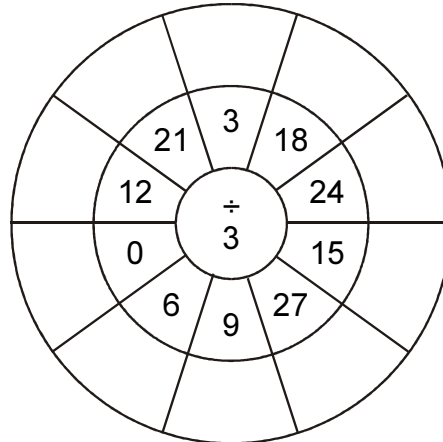
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg

Halving Lg

Nice Numbers
 $+ \text{Nr } 100$

$- \text{Nr } 100$

$\times 5$

$\times 50, 25$
Revision

Information for Parents: Doubling 2-digit Numbers

Doubling 2-digit numbers

Double both places, starting with the tens.

For example, Double 23: double the 2 (tens), double the 3: 4 tens + 6 = 46.

Doubling without regrouping

- | | | | |
|--------------------------|---------------------------|---------------------------|---------------------------|
| 1) $10 \times 2 =$ _____ | 6) $21 \times 2 =$ _____ | 11) $41 \times 2 =$ _____ | 16) $1 \times 2 =$ _____ |
| 2) $32 \times 2 =$ _____ | 7) $34 \times 2 =$ _____ | 12) $43 \times 2 =$ _____ | 17) $23 \times 2 =$ _____ |
| 3) $11 \times 2 =$ _____ | 8) $23 \times 2 =$ _____ | 13) $22 \times 2 =$ _____ | 18) $12 \times 2 =$ _____ |
| 4) $34 \times 2 =$ _____ | 9) $44 \times 2 =$ _____ | 14) $24 \times 2 =$ _____ | 19) $41 \times 2 =$ _____ |
| 5) $13 \times 2 =$ _____ | 10) $40 \times 2 =$ _____ | 15) $11 \times 2 =$ _____ | 20) $30 \times 2 =$ _____ |

Doubling 2-digit numbers with regrouping

Start by doubling the tens. For example, Double 46: double 4 = 8. Try to remember this number. If you need to, you can write the 8 very lightly until you have doubled the ones."

Now double the ones: double 6 = 12. Add the ten to the 8 tens, write "9" (if you wrote "8" softly, write over it with "9"). Then record the remaining ones, "2". Double 46 = 92.

Doubling with regrouping

- | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|
| 21) $17 \times 2 =$ _____ | 26) $24 \times 2 =$ _____ | 31) $24 \times 2 =$ _____ | 36) $29 \times 2 =$ _____ |
| 22) $39 \times 2 =$ _____ | 27) $38 \times 2 =$ _____ | 32) $45 \times 2 =$ _____ | 37) $47 \times 2 =$ _____ |
| 23) $26 \times 2 =$ _____ | 28) $18 \times 2 =$ _____ | 33) $27 \times 2 =$ _____ | 38) $37 \times 2 =$ _____ |
| 24) $21 \times 2 =$ _____ | 29) $14 \times 2 =$ _____ | 34) $42 \times 2 =$ _____ | 39) $46 \times 2 =$ _____ |
| 25) $27 \times 2 =$ _____ | 30) $28 \times 2 =$ _____ | 35) $46 \times 2 =$ _____ | 40) $43 \times 2 =$ _____ |

$\times 10, \times 100$ or $\times 1000$, including decimals

- | | |
|--------------------------------|--------------------------------|
| 41) $6.3 \times 1,000 =$ _____ | 46) $64.0 \times 10 =$ _____ |
| 42) $39.5 \times 10 =$ _____ | 47) $126 \times 1,000 =$ _____ |
| 43) $102 \times 10 =$ _____ | 48) $46.1 \times 100 =$ _____ |
| 44) $949 \times 100 =$ _____ | 49) $878 \times 1,000 =$ _____ |
| 45) $497 \times 100 =$ _____ | 50) $7.2 \times 10 =$ _____ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".



x 10,100,1000
÷10,100,1000

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

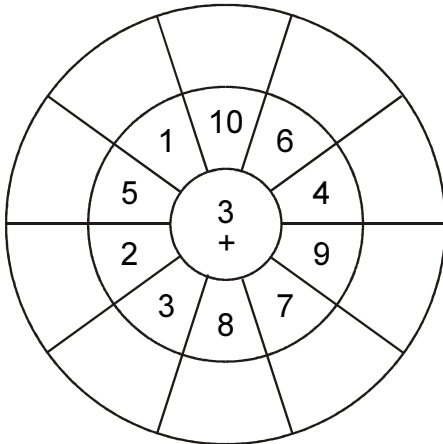
– Nr 100
x5

x 50,25
Revision

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

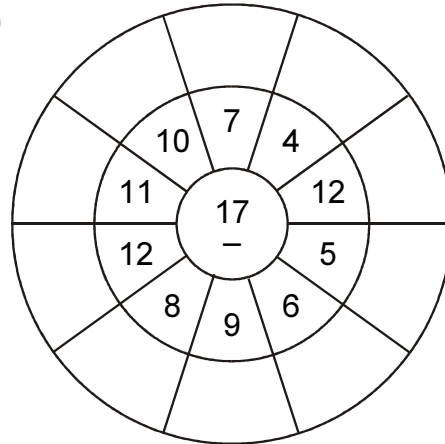
Addition

1)



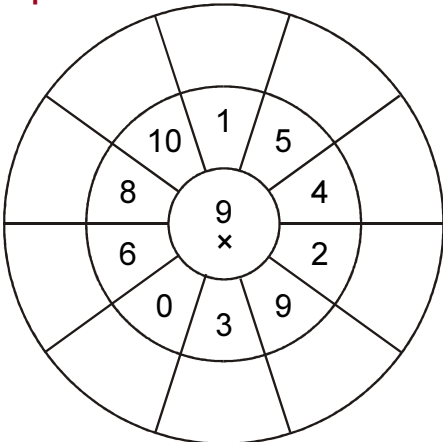
Subtraction

2)

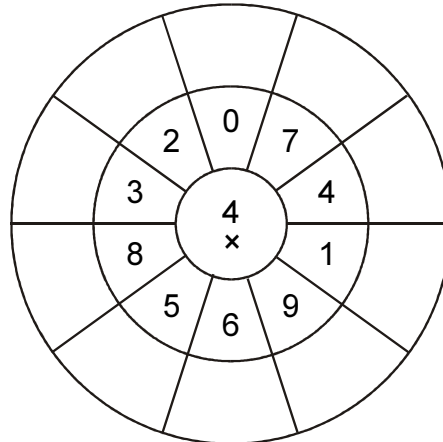


Multiplication

3)

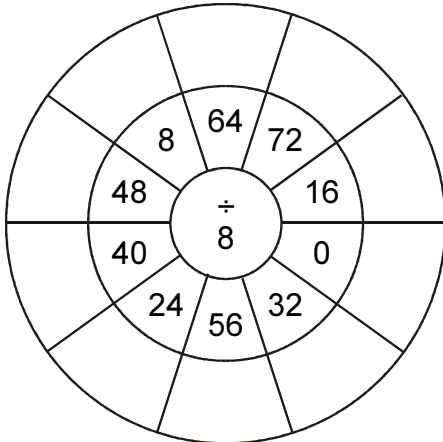


4)

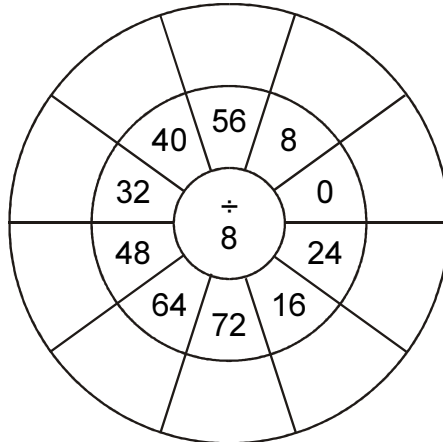


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Information for Parents: Halving 2-digit Numbers

Halving 2-digit numbers

Being able to halve a number is often useful, for example when simplifying common fractions, Sharing money etc.

Halving 2-digit numbers without regrouping

Halve the tens, then halve the ones.

For example, halve 48: Half 4 (tens) + half 8 (ones) = 2 tens + 4 ones = 24.

Halve these numbers

- | | | | |
|------------------------|-------------------------|-------------------------|-------------------------|
| 1) $20 \div 2 =$ _____ | 2) $23 \div 2 =$ _____ | 11) $40 \div 2 =$ _____ | 12) $24 \div 2 =$ _____ |
| 3) $44 \div 2 =$ _____ | 4) $24 \div 2 =$ _____ | 13) $30 \div 2 =$ _____ | 14) $41 \div 2 =$ _____ |
| 5) $42 \div 2 =$ _____ | 6) $30 \div 2 =$ _____ | 15) $34 \div 2 =$ _____ | 16) $42 \div 2 =$ _____ |
| 7) $10 \div 2 =$ _____ | 8) $12 \div 2 =$ _____ | 17) $22 \div 2 =$ _____ | 18) $13 \div 2 =$ _____ |
| 9) $22 \div 2 =$ _____ | 10) $32 \div 2 =$ _____ | 19) $32 \div 2 =$ _____ | 20) $20 \div 2 =$ _____ |

Halving 2-digit numbers with regrouping

Start with the tens, then the ones. If there is an odd number of tens, take half of the number one less, then add ten to the ones for halving. For example, halve 74: half 6 (tens) + half 14 (ones) = 3 tens + 7 ones = 37.

Halve these numbers

- | | | | |
|-------------------------|-------------------------|-------------------------|-------------------------|
| 21) $46 \div 2 =$ _____ | 22) $66 \div 2 =$ _____ | 31) $52 \div 2 =$ _____ | 32) $14 \div 2 =$ _____ |
| 23) $72 \div 2 =$ _____ | 24) $84 \div 2 =$ _____ | 33) $72 \div 2 =$ _____ | 34) $76 \div 2 =$ _____ |
| 25) $36 \div 2 =$ _____ | 26) $32 \div 2 =$ _____ | 35) $54 \div 2 =$ _____ | 36) $58 \div 2 =$ _____ |
| 27) $52 \div 2 =$ _____ | 28) $20 \div 2 =$ _____ | 37) $46 \div 2 =$ _____ | 38) $28 \div 2 =$ _____ |
| 29) $14 \div 2 =$ _____ | 30) $62 \div 2 =$ _____ | 39) $56 \div 2 =$ _____ | 40) $62 \div 2 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 41) $444 \times 2 =$ _____ | 45) $380 \times 2 =$ _____ | 49) $714 \times 2 =$ _____ |
| 42) $281 \times 2 =$ _____ | 46) $218 \times 2 =$ _____ | 50) $749 \times 2 =$ _____ |
| 43) $534 \times 2 =$ _____ | 47) $721 \times 2 =$ _____ | 51) $476 \times 2 =$ _____ |
| 44) $737 \times 2 =$ _____ | 48) $299 \times 2 =$ _____ | 52) $752 \times 2 =$ _____ |



x 10,100,1000
÷10,100,1000

Doubling Lg

Nice Numbers

– Nr 100

x 50,25

Revision

Halving Lg

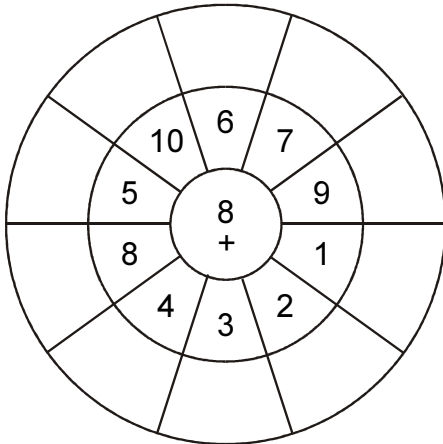
+ Nr 100

x5

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

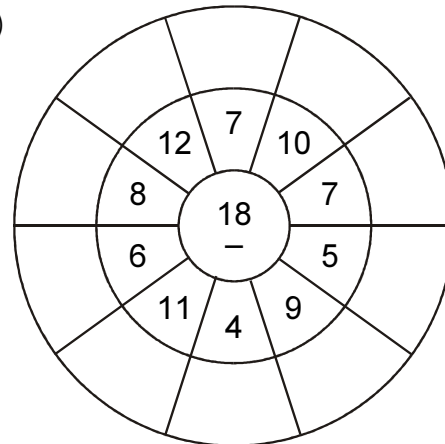
Addition

1)



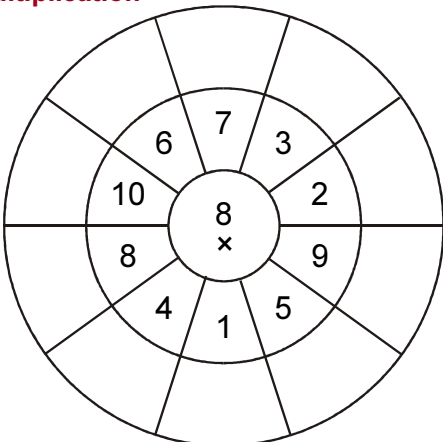
Subtraction

2)

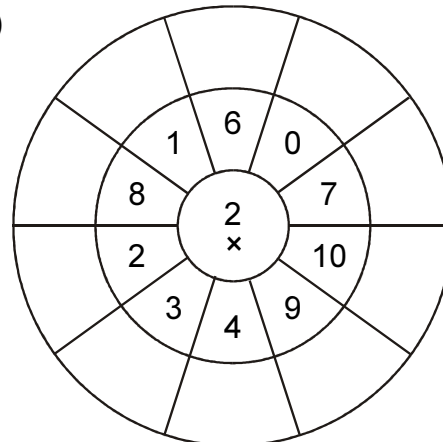


Multiplication

3)

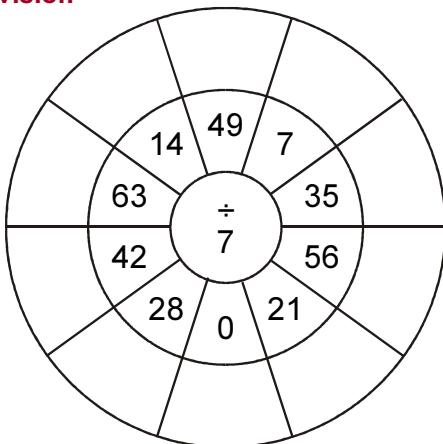


4)

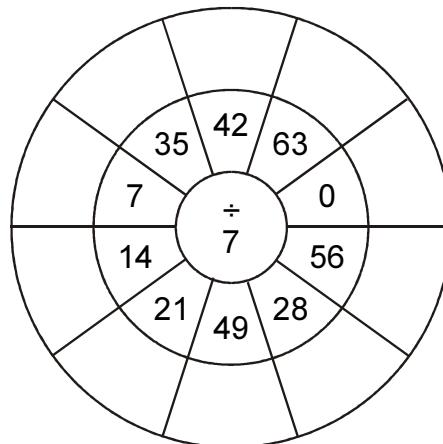


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	– Nr 100 x5	x 50,25 Revision
-------------------------------	---------------------------	--------------------------	----------------	---------------------

Information for Parents: Adding "Nice" Numbers

Adding pairs of "nice" numbers:

When mentally adding a set of numbers, proficient thinkers will look for numbers which add easily together. These pairs will usually be two numbers whose sum is 10 or 100.

Cross off the numbers as they are added so as not to get confused.

For example: $\cancel{7} + 6 + \cancel{8} + \overset{10}{\cancel{2}} + \overset{10}{\cancel{3}} = 20 + 6 = 26$

Add the "nice" numbers to find the sum (cross them off as you add them).

1) $3 + 7 + 5 + 1 + 9 =$ _____ 2) $1 + 8 + 9 + 2 + 9 =$ _____

3) $2 + 8 + 7 + 3 + 7 =$ _____ 4) $5 + 1 + 5 + 1 + 9 =$ _____

5) $5 + 1 + 8 + 5 + 2 =$ _____ 6) $7 + 3 + 8 + 2 + 8 =$ _____

7) $30 + 70 + 50 + 40 + 10 =$ _____ 8) $60 + 90 + 40 + 10 + 30 =$ _____

9) $80 + 10 + 90 + 40 + 20 =$ _____ 10) $6 + 2 + 9 + 8 + 4 =$ _____

Halve these numbers

11) $818 \div 2 =$ _____ 12) $122 \div 2 =$ _____ 13) $902 \div 2 =$ _____

14) $136 \div 2 =$ _____ 15) $82 \div 2 =$ _____ 16) $348 \div 2 =$ _____

17) $502 \div 2 =$ _____ 18) $760 \div 2 =$ _____ 19) $368 \div 2 =$ _____

20) $668 \div 2 =$ _____ 21) $202 \div 2 =$ _____ 22) $196 \div 2 =$ _____

23) $644 \div 2 =$ _____ 24) $920 \div 2 =$ _____ 25) $496 \div 2 =$ _____

Double these numbers

26) $355 \times 2 =$ _____ 31) $600 \times 2 =$ _____ 36) $725 \times 2 =$ _____

27) $907 \times 2 =$ _____ 32) $401 \times 2 =$ _____ 37) $148 \times 2 =$ _____

28) $382 \times 2 =$ _____ 33) $663 \times 2 =$ _____ 38) $205 \times 2 =$ _____

29) $852 \times 2 =$ _____ 34) $312 \times 2 =$ _____ 39) $550 \times 2 =$ _____

30) $476 \times 2 =$ _____ 35) $840 \times 2 =$ _____ 40) $891 \times 2 =$ _____

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

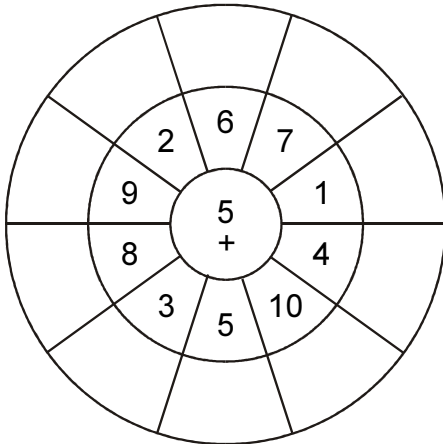


$\times 10, 100, 1000$	Doubling Lg	Nice Numbers	$- \text{Nr } 100$	$\times 50, 25$
$\div 10, 100, 1000$	Halving Lg	$+ \text{Nr } 100$	$\times 5$	Revision

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

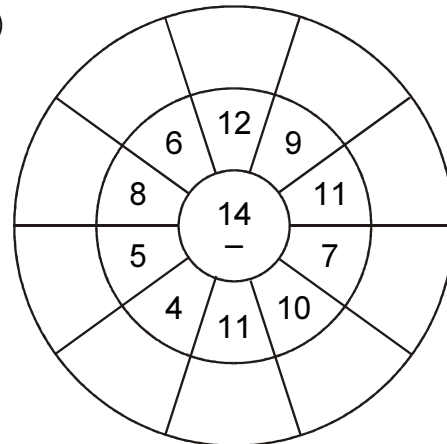
Addition

1)



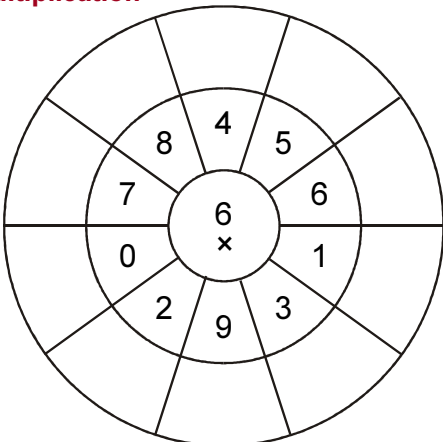
Subtraction

2)

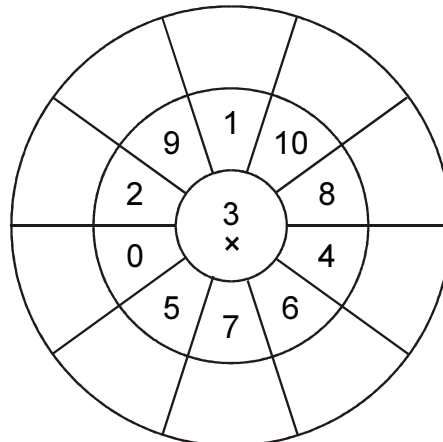


Multiplication

3)

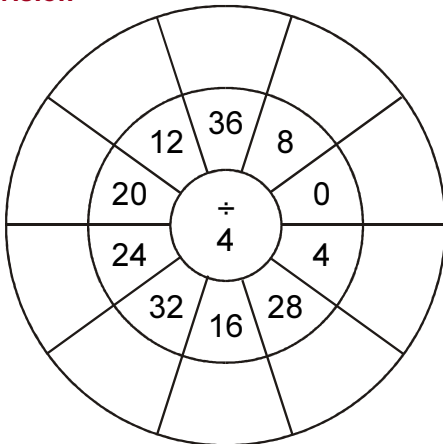


4)

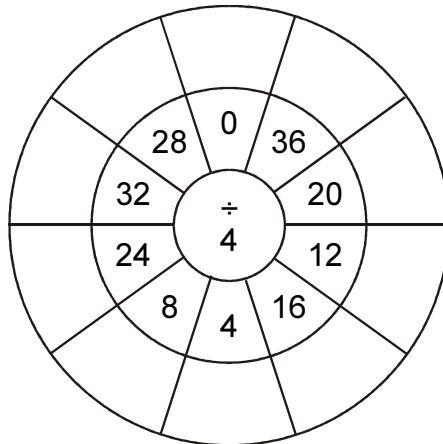


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000
÷10,100,1000

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

– Nr 100

x5

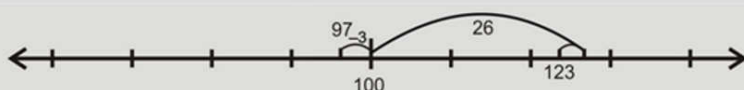
x 50,25
Revision

Information for Parents: Adding Near 100 Numbers

Adding near 100:

When adding near 100 numbers, a “compensation” method can often be used.

For example: $97 + 26 = (100 + 26) - 3 = (126 - 3) = 123$



As 97 is 3 less than 100, add 100 then take 3 off the answer.

Addition near 100

- | | | |
|----------------------|-----------------------|-----------------------|
| 1) $97 + 39 =$ _____ | 6) $93 + 25 =$ _____ | 11) $95 + 35 =$ _____ |
| 2) $96 + 42 =$ _____ | 7) $95 + 12 =$ _____ | 12) $94 + 39 =$ _____ |
| 3) $97 + 21 =$ _____ | 8) $98 + 26 =$ _____ | 13) $99 + 31 =$ _____ |
| 4) $97 + 11 =$ _____ | 9) $99 + 40 =$ _____ | 14) $95 + 32 =$ _____ |
| 5) $97 + 26 =$ _____ | 10) $96 + 39 =$ _____ | 15) $98 + 17 =$ _____ |

Halve these numbers

- | | | |
|--------------------------|--------------------------|--------------------------|
| 16) $176 \div 2 =$ _____ | 17) $624 \div 2 =$ _____ | 18) $790 \div 2 =$ _____ |
| 19) $986 \div 2 =$ _____ | 20) $556 \div 2 =$ _____ | 21) $22 \div 2 =$ _____ |
| 22) $494 \div 2 =$ _____ | 23) $440 \div 2 =$ _____ | 24) $910 \div 2 =$ _____ |
| 25) $804 \div 2 =$ _____ | 26) $870 \div 2 =$ _____ | 27) $318 \div 2 =$ _____ |
| 28) $704 \div 2 =$ _____ | 29) $452 \div 2 =$ _____ | 30) $100 \div 2 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $121 \times 2 =$ _____ | 35) $651 \times 2 =$ _____ | 39) $626 \times 2 =$ _____ |
| 32) $760 \times 2 =$ _____ | 36) $353 \times 2 =$ _____ | 40) $811 \times 2 =$ _____ |
| 33) $874 \times 2 =$ _____ | 37) $876 \times 2 =$ _____ | 41) $444 \times 2 =$ _____ |
| 34) $633 \times 2 =$ _____ | 38) $176 \times 2 =$ _____ | 42) $580 \times 2 =$ _____ |

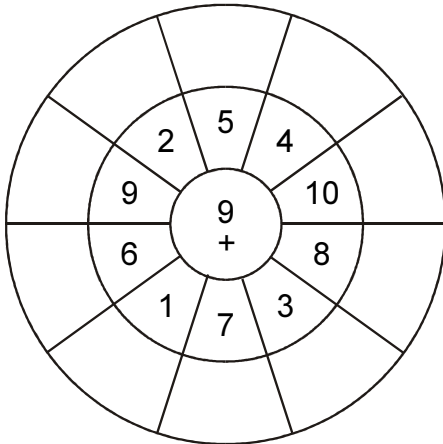


$\times 10, 100, 1000$	Doubling Lg	Nice Numbers	$- \text{Nr } 100$	$\times 50, 25$
$\div 10, 100, 1000$	Halving Lg	<div style="border: 1px solid black; padding: 2px;">$+ \text{Nr } 100$</div>	$\times 5$	Revision

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

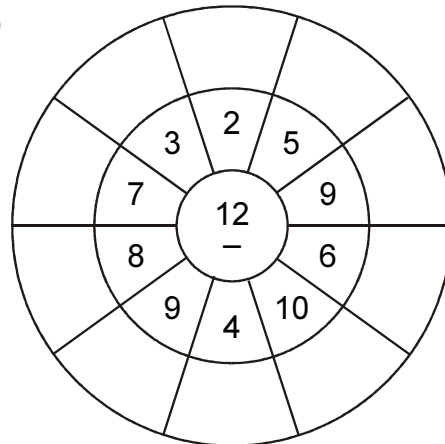
Addition

1)



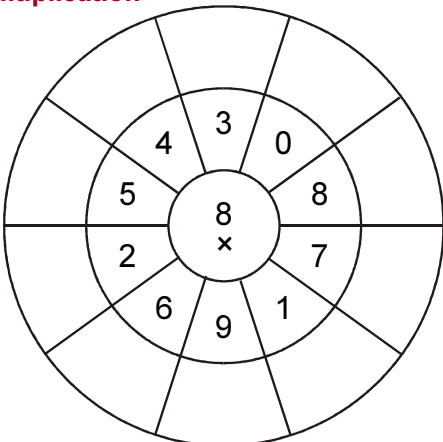
Subtraction

2)

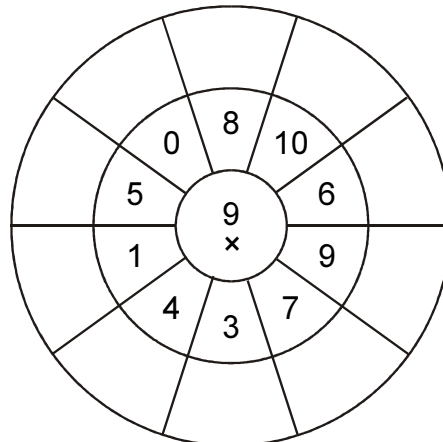


Multiplication

3)

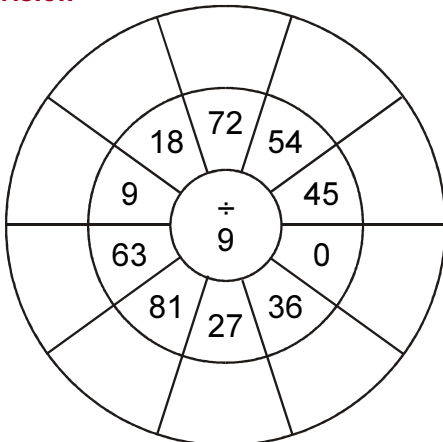


4)

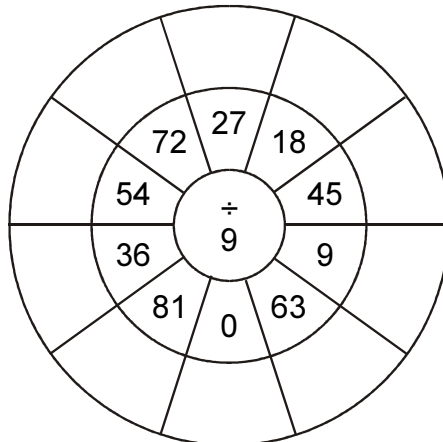


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
 $+ \text{Nr } 100$

$- \text{Nr } 100$
 $\times 5$

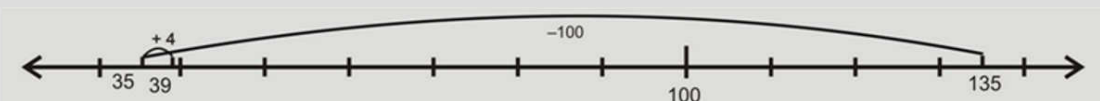
$\times 50, 25$
Revision

Information for Parents: Subtracting Near 100 Numbers

Subtracting near 100:

When subtracting a number just less than 100, we can first take away 100, then compensate by adding the difference.

For example: $135 - 96 = (135 - 100) + 4 = 35 + 4 = 39$



Subtraction near 100

- | | | |
|-----------------------|------------------------|------------------------|
| 1) $138 - 99 =$ _____ | 6) $135 - 97 =$ _____ | 11) $143 - 92 =$ _____ |
| 2) $120 - 98 =$ _____ | 7) $127 - 95 =$ _____ | 12) $109 - 95 =$ _____ |
| 3) $127 - 96 =$ _____ | 8) $135 - 96 =$ _____ | 13) $137 - 97 =$ _____ |
| 4) $115 - 97 =$ _____ | 9) $116 - 92 =$ _____ | 14) $118 - 98 =$ _____ |
| 5) $138 - 94 =$ _____ | 10) $132 - 96 =$ _____ | 15) $125 - 91 =$ _____ |

Addition near 100

- | | | |
|------------------------|------------------------|------------------------|
| 16) $196 + 41 =$ _____ | 21) $105 + 34 =$ _____ | 26) $96 + 25 =$ _____ |
| 17) $103 + 36 =$ _____ | 22) $591 + 13 =$ _____ | 27) $95 + 23 =$ _____ |
| 18) $299 + 41 =$ _____ | 23) $198 + 24 =$ _____ | 28) $107 + 10 =$ _____ |
| 19) $404 + 14 =$ _____ | 24) $94 + 12 =$ _____ | 29) $206 + 36 =$ _____ |
| 20) $100 + 24 =$ _____ | 25) $306 + 26 =$ _____ | 30) $91 + 20 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $329 \times 2 =$ _____ | 34) $208 \times 2 =$ _____ | 37) $622 \times 2 =$ _____ |
| 32) $325 \times 2 =$ _____ | 35) $744 \times 2 =$ _____ | 38) $842 \times 2 =$ _____ |
| 33) $493 \times 2 =$ _____ | 36) $330 \times 2 =$ _____ | 39) $226 \times 2 =$ _____ |

Multiplication

- | | |
|--------------------------|---------------------------|
| 40) $9 \times 6 =$ _____ | 43) $8 \times 5 =$ _____ |
| 41) $7 \times 5 =$ _____ | 44) $10 \times 9 =$ _____ |
| 42) $7 \times 7 =$ _____ | 45) $5 \times 5 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 46) $64 \div 8 =$ _____ | 49) $45 \div 5 =$ _____ |
| 47) $54 \div 6 =$ _____ | 50) $72 \div 8 =$ _____ |
| 48) $36 \div 6 =$ _____ | 51) $60 \div 6 =$ _____ |



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
 $+ \text{Nr } 100$

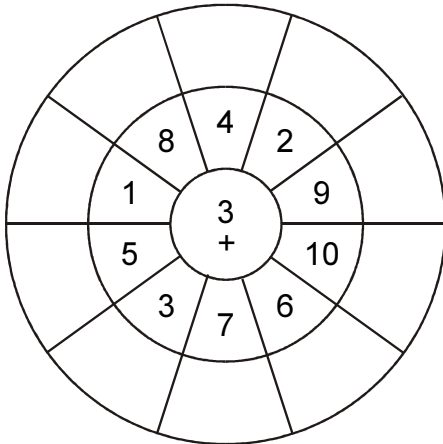
$- \text{Nr } 100$
 $\times 5$

$\times 50, 25$
Revision

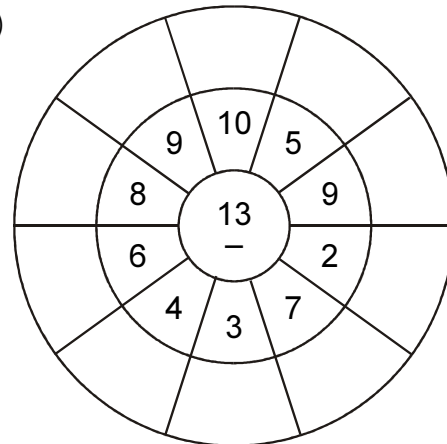
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

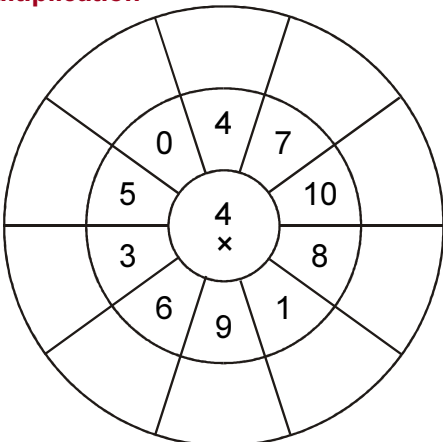
1)

**Subtraction**

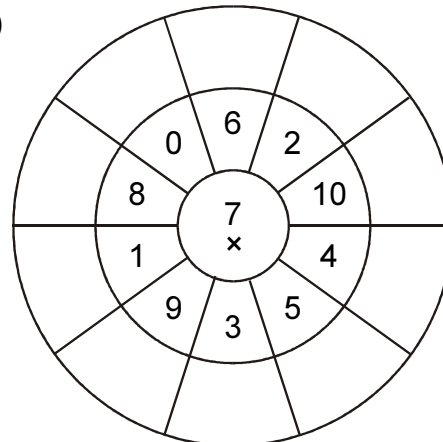
2)

**Multiplication**

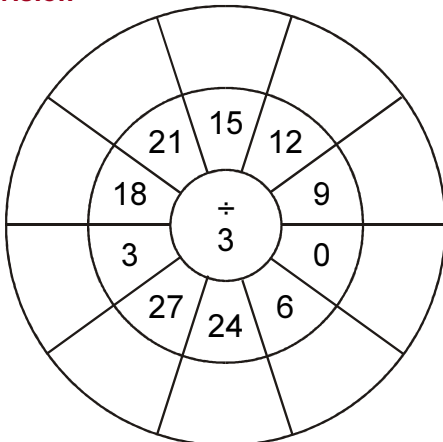
3)



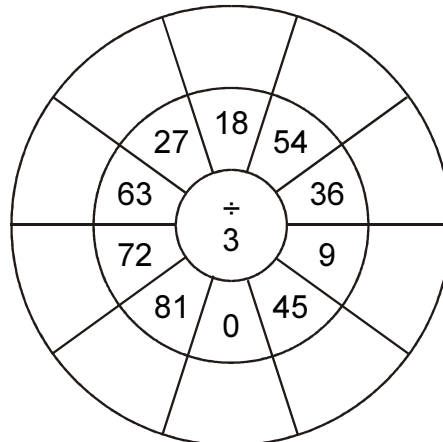
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000
÷10,100,1000

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

– Nr 100

x 50,25

x5

Revision

Information for Parents: Multiplying 2-digit numbers by 5

Multiplying 2-digit numbers by 5

We can use the same strategy we used for the x5 number facts: multiply the number by 10 first, then halve it.
For example, 37×5 : $37 \times 10 = 370$. Half of 370 = 185 $38 \times 5 = 185$

2 digit numbers x 5

- | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|
| 1) $42 \times 10 =$ _____ | 6) $67 \times 5 =$ _____ | 11) $49 \times 5 =$ _____ | 16) $94 \times 5 =$ _____ |
| 2) $42 \times 5 =$ _____ | 7) $74 \times 5 =$ _____ | 12) $84 \times 5 =$ _____ | 17) $88 \times 5 =$ _____ |
| 3) $85 \times 10 =$ _____ | 8) $90 \times 5 =$ _____ | 13) $56 \times 5 =$ _____ | 18) $36 \times 5 =$ _____ |
| 4) $85 \times 5 =$ _____ | 9) $88 \times 5 =$ _____ | 14) $62 \times 5 =$ _____ | 19) $58 \times 5 =$ _____ |
| 5) $68 \times 5 =$ _____ | 10) $64 \times 5 =$ _____ | 15) $98 \times 5 =$ _____ | 20) $29 \times 5 =$ _____ |

3 digit numbers x 5

- | | | |
|-----------------------------|----------------------------|----------------------------|
| 21) $450 \times 10 =$ _____ | 25) $520 \times 5 =$ _____ | 29) $968 \times 5 =$ _____ |
| 22) $450 \times 5 =$ _____ | 26) $412 \times 5 =$ _____ | 30) $130 \times 5 =$ _____ |
| 23) $262 \times 10 =$ _____ | 27) $818 \times 5 =$ _____ | 31) $886 \times 5 =$ _____ |
| 24) $262 \times 5 =$ _____ | 28) $644 \times 5 =$ _____ | 32) $844 \times 5 =$ _____ |

Subtraction near 100

- | | | |
|-------------------------|-------------------------|-------------------------|
| 33) $126 - 108 =$ _____ | 38) $144 - 107 =$ _____ | 43) $126 - 106 =$ _____ |
| 34) $122 - 105 =$ _____ | 39) $211 - 98 =$ _____ | 44) $113 - 96 =$ _____ |
| 35) $138 - 104 =$ _____ | 40) $129 - 99 =$ _____ | 45) $514 - 100 =$ _____ |
| 36) $112 - 93 =$ _____ | 41) $344 - 92 =$ _____ | 46) $140 - 100 =$ _____ |
| 37) $134 - 106 =$ _____ | 42) $137 - 94 =$ _____ | 47) $127 - 98 =$ _____ |

Multiplication

- | | |
|---------------------------|---------------------------|
| 48) $5 \times 5 =$ _____ | 52) $10 \times 6 =$ _____ |
| 49) $9 \times 8 =$ _____ | 53) $10 \times 7 =$ _____ |
| 50) $10 \times 5 =$ _____ | 54) $9 \times 5 =$ _____ |
| 51) $9 \times 9 =$ _____ | 55) $6 \times 7 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 56) $64 \div 8 =$ _____ | 60) $35 \div 5 =$ _____ |
| 57) $50 \div 5 =$ _____ | 61) $60 \div 6 =$ _____ |
| 58) $40 \div 8 =$ _____ | 62) $49 \div 7 =$ _____ |
| 59) $80 \div 8 =$ _____ | 63) $25 \div 5 =$ _____ |



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

– Nr 100

$\times 50, 25$

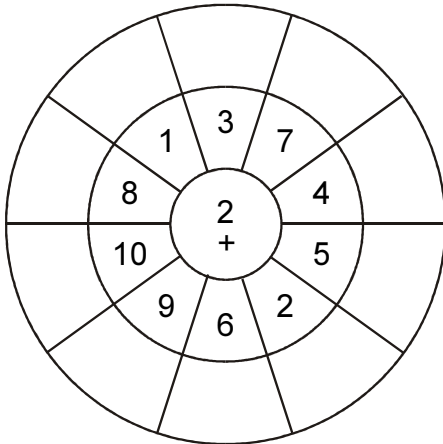
$\times 5$

Revision

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

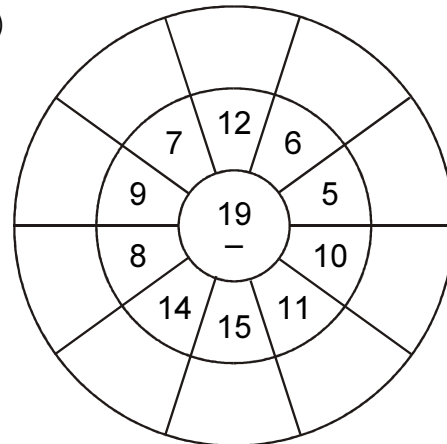
Addition

1)



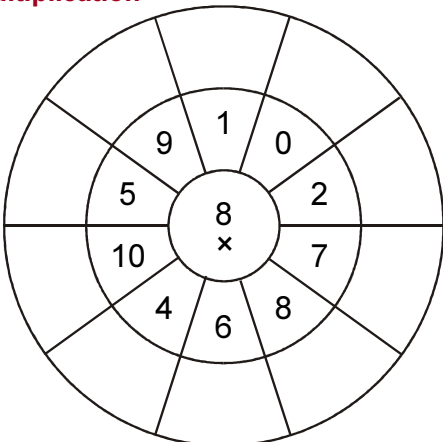
Subtraction

2)

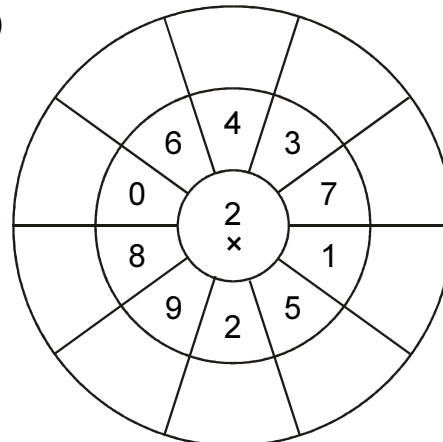


Multiplication

3)

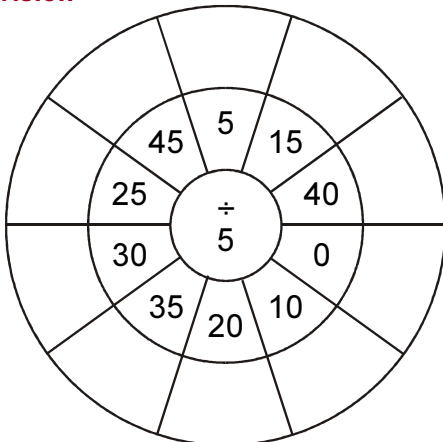


4)

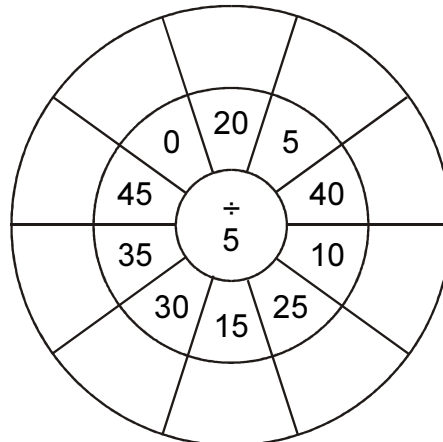


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000
÷ 10,100,1000

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

– Nr 100
x5

x 50,25
Revision

Information for Parents: Multiply Large Numbers x 50

Multiplying 2-digit numbers x 50

Multiplying by 50 is quite easy to do, seeing that it is one half of 100.

Multiplying by 50 can be done by multiplying by 100 then halving the result, or in the opposite order, halve the other number first, then multiply by 100.

For example, $62 \times 50 = (62 \times 100) \div 2 = 6200 \div 2 = 3100$

or: $62 \times 50 = (62 \div 2) \times 100 = 31 \times 100 = 3100$

2 digit numbers x 50

- | | | |
|----------------------------|----------------------------|----------------------------|
| 1) $42 \times 100 =$ _____ | 6) $32 \times 50 =$ _____ | 11) $35 \times 50 =$ _____ |
| 2) $42 \times 50 =$ _____ | 7) $93 \times 50 =$ _____ | 12) $43 \times 50 =$ _____ |
| 3) $82 \times 100 =$ _____ | 8) $86 \times 50 =$ _____ | 13) $68 \times 50 =$ _____ |
| 4) $82 \times 50 =$ _____ | 9) $27 \times 50 =$ _____ | 14) $88 \times 50 =$ _____ |
| 5) $84 \times 50 =$ _____ | 10) $23 \times 50 =$ _____ | 15) $76 \times 50 =$ _____ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 16) $793 \times 2 =$ _____ | 20) $136 \times 2 =$ _____ | 24) $203 \times 2 =$ _____ |
| 17) $702 \times 2 =$ _____ | 21) $672 \times 2 =$ _____ | 25) $407 \times 2 =$ _____ |
| 18) $785 \times 2 =$ _____ | 22) $401 \times 2 =$ _____ | 26) $307 \times 2 =$ _____ |
| 19) $110 \times 2 =$ _____ | 23) $595 \times 2 =$ _____ | 27) $238 \times 2 =$ _____ |

Addition revision

- | | |
|----------------------|---------------------|
| 28) $5 + 6 =$ _____ | 33) $3 + 4 =$ _____ |
| 29) $5 + 7 =$ _____ | 34) $6 + 7 =$ _____ |
| 30) $9 + 9 =$ _____ | 35) $9 + 5 =$ _____ |
| 31) $9 + 8 =$ _____ | 36) $8 + 6 =$ _____ |
| 32) $10 + 4 =$ _____ | 37) $3 + 9 =$ _____ |

Subtraction revision

- | | |
|----------------------|----------------------|
| 38) $11 - 4 =$ _____ | 43) $13 - 7 =$ _____ |
| 39) $16 - 9 =$ _____ | 44) $12 - 5 =$ _____ |
| 40) $16 - 8 =$ _____ | 45) $17 - 8 =$ _____ |
| 41) $14 - 9 =$ _____ | 46) $11 - 5 =$ _____ |
| 42) $13 - 8 =$ _____ | 47) $12 - 4 =$ _____ |

Multiplication

- | | |
|---------------------------|---------------------------|
| 48) $9 \times 6 =$ _____ | 51) $6 \times 7 =$ _____ |
| 49) $9 \times 9 =$ _____ | 52) $10 \times 5 =$ _____ |
| 50) $10 \times 6 =$ _____ | 53) $5 \times 8 =$ _____ |

Division

- | | |
|-------------------------|-------------------------|
| 54) $80 \div 8 =$ _____ | 57) $90 \div 9 =$ _____ |
| 55) $45 \div 9 =$ _____ | 58) $70 \div 7 =$ _____ |
| 56) $72 \div 8 =$ _____ | 59) $30 \div 6 =$ _____ |



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

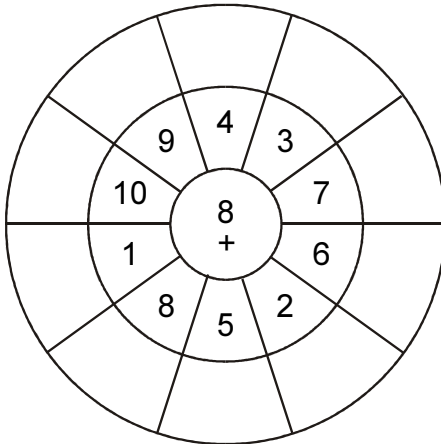
– Nr 100
x5

$\times 50, 25$
Revision

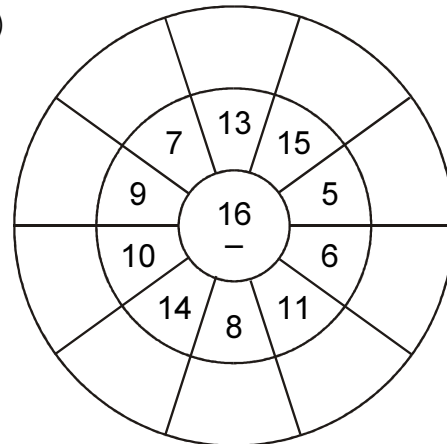
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

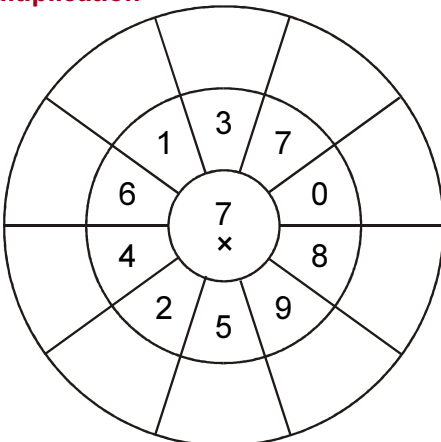
1)

**Subtraction**

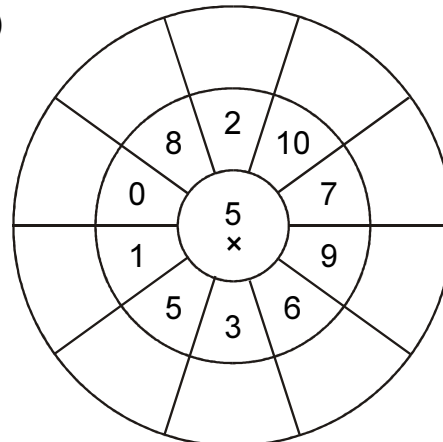
2)

**Multiplication**

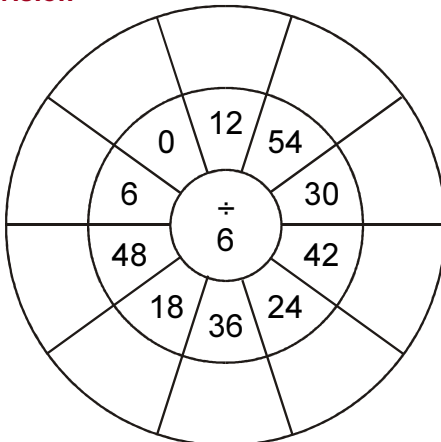
3)



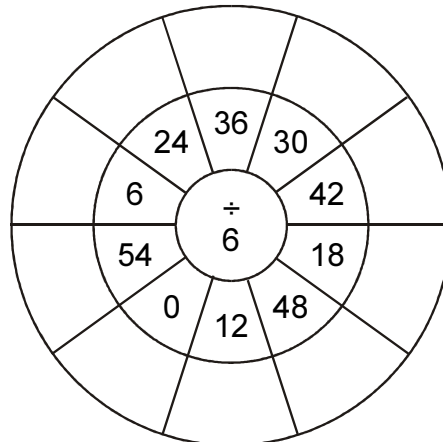
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	– Nr 100	x 50,25	Revision
-------------------------------	---------------------------	--------------------------	----------	---------	----------

Multiply these numbers including decimals

- 1) $8.59 \times 100 =$ _____ 6) $0.604 \times 100 =$ _____
- 2) $2.00 \times 1,000 =$ _____ 7) $0.509 \times 10 =$ _____
- 3) $660 \times 10 =$ _____ 8) $975 \times 1,000 =$ _____
- 4) $426 \times 1,000 =$ _____ 9) $95.8 \times 100 =$ _____
- 5) $0.4 \times 100 =$ _____ 10) $325 \times 1,000 =$ _____

2 digit numbers x 25

- 11) $50 \times 25 =$ _____ 14) $44 \times 25 =$ _____ 17) $70 \times 25 =$ _____
- 12) $82 \times 25 =$ _____ 15) $40 \times 25 =$ _____ 18) $80 \times 25 =$ _____
- 13) $96 \times 25 =$ _____ 16) $28 \times 25 =$ _____ 19) $64 \times 25 =$ _____

2 digit numbers x 50

- 20) $41 \times 50 =$ _____ 23) $74 \times 50 =$ _____ 26) $49 \times 50 =$ _____
- 21) $46 \times 50 =$ _____ 24) $92 \times 50 =$ _____ 27) $33 \times 50 =$ _____
- 22) $25 \times 50 =$ _____ 25) $78 \times 50 =$ _____ 28) $76 \times 50 =$ _____

Add the nice numbers to find the sum (cross them off as you add them).

- 29) $3 + 7 + 7 + 2 + 8 + 4 =$ _____ 33) $3 + 5 + 6 + 2 + 3 + 6 =$ _____
- 30) $3 + 7 + 3 + 4 + 2 + 8 =$ _____ 34) $5 + 2 + 4 + 1 + 1 + 7 =$ _____
- 31) $5 + 6 + 3 + 5 + 5 + 9 =$ _____ 35) $4 + 3 + 8 + 4 + 2 + 2 =$ _____
- 32) $4 + 6 + 5 + 6 + 9 + 5 =$ _____ 36) $2 + 7 + 6 + 9 + 8 + 3 =$ _____

Addition revision

- 37) $5 + 8 =$ _____ 41) $3 + 4 =$ _____
- 38) $4 + 4 =$ _____ 42) $7 + 7 =$ _____
- 39) $8 + 4 =$ _____ 43) $10 + 7 =$ _____
- 40) $4 + 5 =$ _____ 44) $4 + 9 =$ _____

Subtraction revision

- 45) $18 - 9 =$ _____ 49) $15 - 7 =$ _____
- 46) $10 - 5 =$ _____ 50) $14 - 6 =$ _____
- 47) $17 - 8 =$ _____ 51) $17 - 9 =$ _____
- 48) $8 - 2 =$ _____ 52) $10 - 2 =$ _____



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
 $+ \text{Nr } 100$

$- \text{Nr } 100$

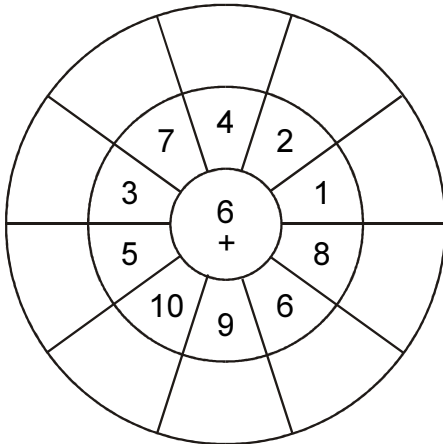
$\times 50, 25$
 $\times 5$

Revision

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

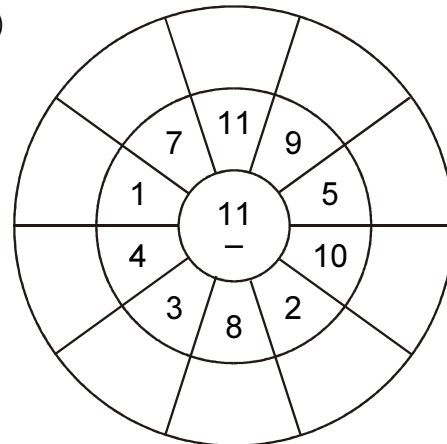
Addition

1)



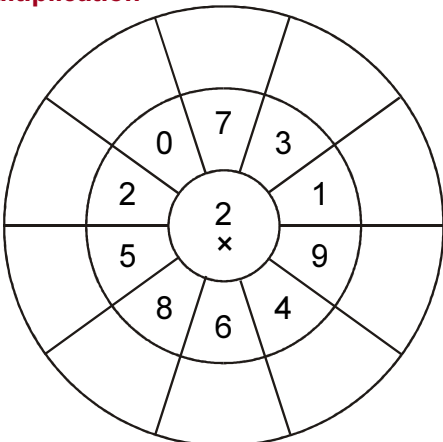
Subtraction

2)

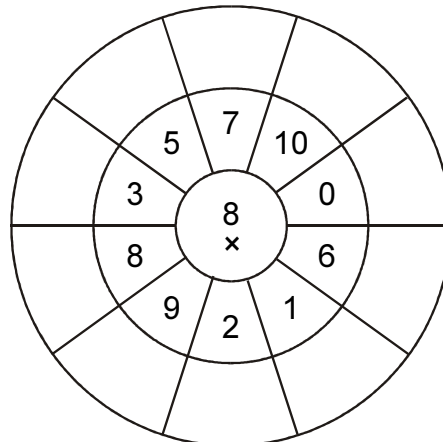


Multiplication

3)

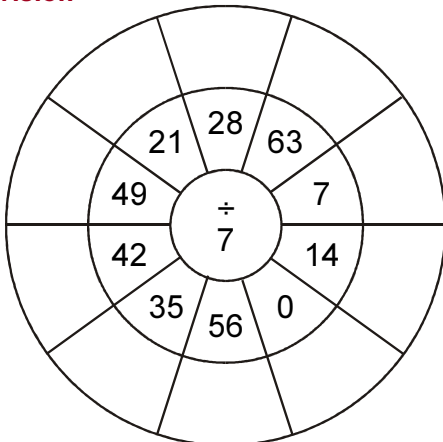


4)

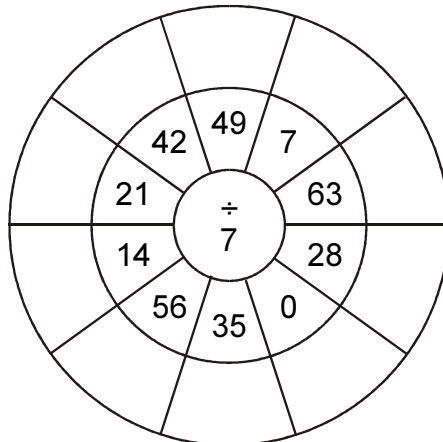


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Answer Keys

Answer Keys

Answer Keys are provided for all worksheets in this eBook. Each Answer Key is identified by the title in the header of the page, which is identical to the relevant worksheet.

Suggested Uses:

1. Put the complete set of answer keys in a folder for students to take when marking their own work.
2. Display the relevant answer key on a data projector, with or without an interactive whiteboard, to display the answers to students as they mark each other's responses.

Time:

Score:

Multiplying by 10, 100 or 1,000: 1 [A]

PROFESSOR PETE'S
CLASSROOM

x 10, 100, 1000

÷ 10, 100, 1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

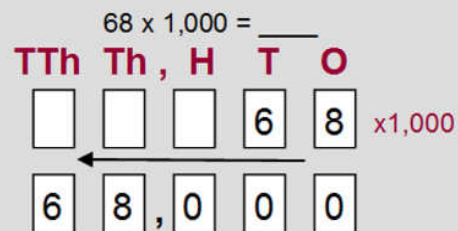
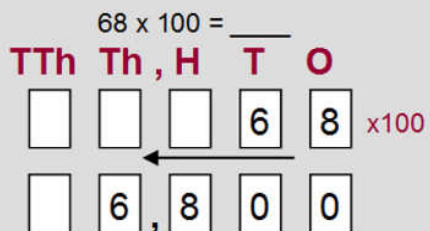
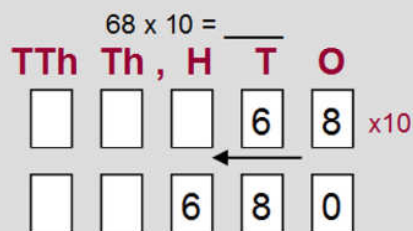
x5

x 50, 25

Revision

To x10, x100, x1,000: Use a number slide.

- x10 move the numbers 1 place. The number is getting bigger, so move each digit to the left.
- x100 move the numbers 2 places to the left.
- x1,000 move the numbers 3 places to the left.



Note to teachers: It is not recommended to talk of “adding zeroes”, since this is not an accurate description of the process. Also it causes problems when numbers with decimals are multiplied. Rather, talk about moving the digits to new locations to make the number bigger by a power of ten.

x 10, x 100, x 1,000

- 1) $66 \times 10 = 660$
- 2) $24 \times 100 = 2,400$
- 3) $47 \times 1,000 = 47,000$
- 4) $45 \times 100 = 4,500$
- 5) $48 \times 100 = 4,800$
- 6) $56 \times 10 = 560$
- 7) $32 \times 100 = 3,200$
- 8) $91 \times 1,000 = 91,000$
- 9) $15 \times 10 = 150$
- 10) $45 \times 1,000 = 45,000$

- 11) $1 \times 1,000 = 1,000$
- 12) $98 \times 100 = 9,800$
- 13) $85 \times 10 = 850$
- 14) $25 \times 1,000 = 25,000$
- 15) $26 \times 10 = 260$
- 16) $84 \times 100 = 8,400$
- 17) $51 \times 1,000 = 51,000$
- 18) $37 \times 100 = 3,700$
- 19) $45 \times 10 = 450$
- 20) $81 \times 1,000 = 81,000$

Addition revision

- 21) $6 + 5 = 11$
- 22) $9 + 8 = 17$
- 23) $4 + 6 = 10$
- 24) $5 + 8 = 13$
- 25) $7 + 4 = 11$
- 26) $9 + 4 = 13$
- 27) $5 + 5 = 10$
- 28) $4 + 5 = 9$
- 29) $3 + 5 = 8$
- 30) $10 + 7 = 17$

Subtraction revision

- 31) $10 - 5 = 5$
- 32) $9 - 4 = 5$
- 33) $17 - 9 = 8$
- 34) $14 - 6 = 8$
- 35) $9 - 2 = 7$
- 36) $12 - 4 = 8$
- 37) $17 - 8 = 9$
- 38) $11 - 3 = 8$
- 39) $16 - 8 = 8$
- 40) $18 - 9 = 9$

This worksheet is part of the Professor Pete's Classroom eBook “Ten Minutes Day 3: Mental Strategies Worksheets”.

Time:

Score:

Multiplying by 10, 100 or 1,000: 1 [B]

PROFESSOR PETE'S
CLASSROOMx 10, 100, 1000
÷ 10, 100, 1000Doubling Lg
Halving LgNice Numbers
+ Nr 100- Nr 100
x5x 50, 25
Revision

To x10, x100, x1,000: Use a number slide.

- x10 move the numbers 1 place. The number is getting bigger, so move each digit to the left.
- x100 move the numbers 2 places to the left.
- x1,000 move the numbers 3 places to the left.

$47.3 \times 10 = \underline{\quad}$

$47.3 \times 100 = \underline{\quad}$

$47.3 \times 1,000 = \underline{\quad}$

TTh Th, H T O . t

			4	3	.	7
			4	3	7	.

x10

TTh Th, H T O . t

			4	3	.	7
			4	3	7	0

x100

TTh Th, H T O . t

			4	3	.	7
			4	3	7	0

x1,000

x 10, x 100, x 1,000

1) $78.9 \times 100 = \underline{7,890.0}$

2) $942 \times 10 = \underline{9,420}$

3) $80.4 \times 10 = \underline{804.0}$

4) $50.4 \times 100 = \underline{5,040.0}$

5) $78.5 \times 10 = \underline{785.0}$

6) $80.2 \times 10 = \underline{802.0}$

7) $997 \times 100 = \underline{99,700}$

8) $83.1 \times 1,000 = \underline{83,100.0}$

9) $72.0 \times 100 = \underline{7,200.0}$

10) $2.9 \times 10 = \underline{29.0}$

11) $94.6 \times 100 = \underline{9,460.0}$

12) $908 \times 100 = \underline{90,800}$

13) $87.1 \times 100 = \underline{8,710.0}$

14) $50.5 \times 10 = \underline{505.0}$

15) $570 \times 1,000 = \underline{570,000}$

16) $38 \times 1,000 = \underline{38,000}$

17) $12.1 \times 100 = \underline{1,210.0}$

18) $31.0 \times 1,000 = \underline{31,000.0}$

19) $95 \times 1,000 = \underline{95,000}$

20) $356 \times 100 = \underline{35,600}$

Addition revision

21) $5 + 7 = \underline{12}$

24) $5 + 4 = \underline{9}$

22) $5 + 5 = \underline{10}$

25) $8 + 4 = \underline{12}$

23) $7 + 4 = \underline{11}$

26) $10 + 7 = \underline{17}$

Subtraction revision

33) $11 - 4 = \underline{7}$

36) $10 - 4 = \underline{6}$

34) $18 - 9 = \underline{9}$

37) $9 - 3 = \underline{6}$

35) $16 - 7 = \underline{9}$

38) $12 - 6 = \underline{6}$

Multiplication revision

27) $8 \times 9 = \underline{72}$

30) $5 \times 8 = \underline{40}$

28) $10 \times 5 = \underline{50}$

31) $5 \times 7 = \underline{35}$

29) $9 \times 7 = \underline{63}$

32) $4 \times 7 = \underline{28}$

Division revision

39) $36 \div 4 = \underline{9}$

42) $36 \div 6 = \underline{6}$

40) $48 \div 6 = \underline{8}$

43) $54 \div 6 = \underline{9}$

41) $72 \div 9 = \underline{8}$

44) $72 \div 8 = \underline{9}$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying by 10, 100 or 1,000: 1 [C]



x 10, 100, 1000

÷ 10, 100, 1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

- Nr 100

x5

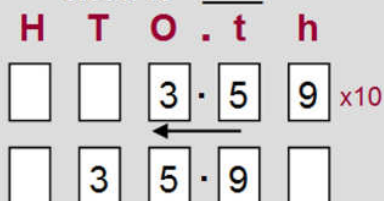
x 50, 25

Revision

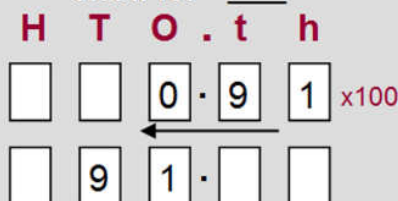
To x10, x100, x1,000: Use a number slide.

- x10 move the numbers **1 place**. The number is getting bigger, so move each digit to the **left**.
- x100 move the numbers **2 places** to the left.
- x1,000 move the numbers **3 places** to the left.

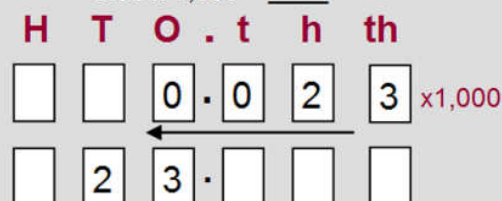
$3.59 \times 10 = \underline{\quad}$



$3.59 \times 100 = \underline{\quad}$



$3.59 \times 1,000 = \underline{\quad}$

**x 10, x 100, x 1,000**

- | | |
|--|--|
| 1) $9.49 \times 100 = \underline{949.00}$ | 11) $49.3 \times 10 = \underline{493.0}$ |
| 2) $2.66 \times 10 = \underline{26.60}$ | 12) $0.338 \times 100 = \underline{33.800}$ |
| 3) $60.8 \times 1,000 = \underline{60,800.0}$ | 13) $635 \times 1,000 = \underline{635,000}$ |
| 4) $77.6 \times 100 = \underline{7,760.0}$ | 14) $7.254 \times 1,000 = \underline{7,254.000}$ |
| 5) $9.22 \times 100 = \underline{922.00}$ | 15) $4.44 \times 1,000 = \underline{4,440.00}$ |
| 6) $521 \times 10 = \underline{5,210}$ | 16) $36.6 \times 10 = \underline{366.0}$ |
| 7) $951 \times 100 = \underline{95,100}$ | 17) $2.97 \times 100 = \underline{297.00}$ |
| 8) $6.17 \times 1,000 = \underline{6,170.00}$ | 18) $395 \times 1,000 = \underline{395,000}$ |
| 9) $275 \times 10 = \underline{2,750}$ | 19) $3.75 \times 100 = \underline{375.00}$ |
| 10) $37.8 \times 1,000 = \underline{37,800.0}$ | 20) $746 \times 100 = \underline{74,600}$ |

Addition revision

- | | |
|------------------------------|------------------------------|
| 21) $5 + 5 = \underline{10}$ | 24) $6 + 5 = \underline{11}$ |
| 22) $9 + 5 = \underline{14}$ | 25) $5 + 6 = \underline{11}$ |
| 23) $3 + 6 = \underline{9}$ | 26) $4 + 5 = \underline{9}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 33) $16 - 8 = \underline{8}$ | 36) $18 - 9 = \underline{9}$ |
| 34) $14 - 6 = \underline{8}$ | 37) $17 - 9 = \underline{8}$ |
| 35) $16 - 7 = \underline{9}$ | 38) $9 - 2 = \underline{7}$ |

Multiplication revision

- | | |
|-----------------------------------|------------------------------------|
| 27) $4 \times 7 = \underline{28}$ | 30) $7 \times 8 = \underline{56}$ |
| 28) $4 \times 5 = \underline{20}$ | 31) $7 \times 7 = \underline{49}$ |
| 29) $6 \times 4 = \underline{24}$ | 32) $10 \times 5 = \underline{50}$ |

Division revision

- | | |
|----------------------------------|---------------------------------|
| 39) $28 \div 7 = \underline{4}$ | 42) $36 \div 9 = \underline{4}$ |
| 40) $40 \div 5 = \underline{8}$ | 43) $81 \div 9 = \underline{9}$ |
| 41) $30 \div 3 = \underline{10}$ | 44) $54 \div 9 = \underline{6}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying by 10, 100 or 1,000: 1 [D]



x 10,100,1000

÷10,100,1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

x5

x 50,25

Revision

x 10, x 100, x 1,000

1) $422 \times 10 = 4,220$

2) $48.3 \times 100 = 4,830.0$

3) $561 \times 10 = 5,610$

4) $7.24 \times 10 = 72.40$

5) $46.3 \times 10 = 463.0$

6) $4.41 \times 1,000 = 4,410.00$

7) $59.2 \times 1,000 = 59,200.0$

8) $6 \times 1,000 = 6,000$

9) $91.0 \times 10 = 910.0$

10) $2.37 \times 1,000 = 2,370.00$

11) $669 \times 10 = 6,690$

12) $7.82 \times 10 = 78.20$

13) $0.573 \times 10 = 5.730$

14) $612 \times 1,000 = 612,000$

15) $564 \times 100 = 56,400$

16) $29.29 \times 100 = 2,929.00$

17) $261 \times 10 = 2,610$

18) $58.1 \times 100 = 5,810.0$

19) $887 \times 1,000 = 887,000$

20) $88.3 \times 10 = 883.0$

21) $9.04 \times 10 = 90.40$

22) $76.6 \times 1,000 = 76,600.0$

23) $0.803 \times 100 = 80.300$

24) $0.17 \times 100 = 17.00$

Addition revision

25) $10 + 7 = 17$

30) $9 + 7 = 16$

26) $9 + 4 = 13$

31) $8 + 8 = 16$

27) $6 + 9 = 15$

32) $10 + 4 = 14$

28) $9 + 6 = 15$

33) $5 + 5 = 10$

29) $7 + 5 = 12$

34) $9 + 9 = 18$

Subtraction revision

45) $16 - 8 = 8$

50) $11 - 2 = 9$

46) $16 - 9 = 7$

51) $14 - 5 = 9$

47) $17 - 8 = 9$

52) $14 - 8 = 6$

48) $13 - 8 = 5$

53) $9 - 2 = 7$

49) $13 - 7 = 6$

54) $11 - 5 = 6$

Multiplication revision

35) $7 \times 4 = 28$

40) $8 \times 8 = 64$

36) $8 \times 9 = 72$

41) $4 \times 6 = 24$

37) $9 \times 9 = 81$

42) $6 \times 6 = 36$

38) $10 \times 7 = 70$

43) $9 \times 8 = 72$

39) $5 \times 8 = 40$

44) $5 \times 6 = 30$

Division revision

55) $30 \div 6 = 5$

60) $54 \div 6 = 9$

56) $40 \div 8 = 5$

61) $42 \div 7 = 6$

57) $72 \div 8 = 9$

62) $72 \div 9 = 8$

58) $32 \div 4 = 8$

63) $24 \div 3 = 8$

59) $30 \div 5 = 6$

64) $35 \div 7 = 5$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

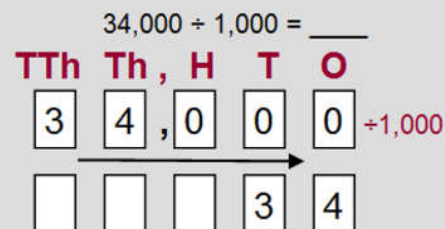
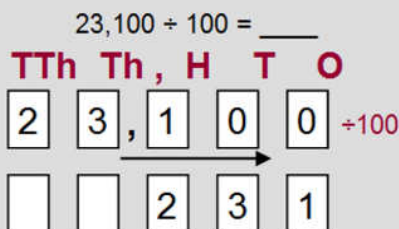
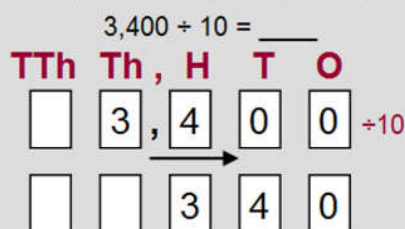
Dividing by 10, 100 or 1,000: 2 [A]



x 10, 100, 1000	Doubling Lg	Nice Numbers	– Nr 100	x 50, 25
÷ 10, 100, 1000	Halving Lg	+ Nr 100	x5	Revision

To ÷10, ÷100, ÷1,000: Use the number slide.

- ÷10 move the numbers 1 place. Which way? **Think!** The numbers need to get smaller! So which way?
- ÷100 move the numbers 2 places.
- ÷1,000 move the numbers 3 places.



Note to teachers: It is not recommended to talk of "removing zeroes", since this is not an accurate description of the process. It also complicates the porces when dealing with decimals. Rather, talk about moving the digits to new locations toake the number smaller by a power of ten.

÷ 10, ÷ 100, ÷ 1000

- | | |
|-------------------------------|--------------------------------|
| 1) 8,900 ÷ 10 = <u>890</u> | 11) 8,790 ÷ 10 = <u>879</u> |
| 2) 3,700 ÷ 100 = <u>37</u> | 12) 64,000 ÷ 100 = <u>640</u> |
| 3) 4,740 ÷ 10 = <u>474</u> | 13) 59,800 ÷ 100 = <u>598</u> |
| 4) 46,000 ÷ 1,000 = <u>46</u> | 14) 31,000 ÷ 1,000 = <u>31</u> |
| 5) 6,200 ÷ 10 = <u>620</u> | 15) 68,130 ÷ 10 = <u>6,813</u> |
| 6) 2,500 ÷ 100 = <u>25</u> | 16) 4,000 ÷ 1,000 = <u>4</u> |
| 7) 7,000 ÷ 100 = <u>70</u> | 17) 10,000 ÷ 1,000 = <u>10</u> |
| 8) 6,100 ÷ 100 = <u>61</u> | 18) 35,600 ÷ 100 = <u>356</u> |
| 9) 80,000 ÷ 1,000 = <u>80</u> | 19) 69,030 ÷ 10 = <u>6,903</u> |
| 10) 780 ÷ 10 = <u>78</u> | 20) 84,000 ÷ 1,000 = <u>84</u> |

Multiplication revision

- | | |
|-----------------------|------------------------|
| 21) 9 × 6 = <u>54</u> | 26) 5 × 5 = <u>25</u> |
| 22) 7 × 3 = <u>21</u> | 27) 10 × 3 = <u>30</u> |
| 23) 4 × 5 = <u>20</u> | 28) 4 × 8 = <u>32</u> |
| 24) 6 × 5 = <u>30</u> | 29) 4 × 2 = <u>8</u> |
| 25) 4 × 4 = <u>16</u> | 30) 4 × 6 = <u>24</u> |

Division revision

- | | |
|-----------------------|-----------------------|
| 31) 21 ÷ 3 = <u>7</u> | 36) 32 ÷ 8 = <u>4</u> |
| 32) 42 ÷ 6 = <u>7</u> | 37) 48 ÷ 8 = <u>6</u> |
| 33) 56 ÷ 7 = <u>8</u> | 38) 36 ÷ 4 = <u>9</u> |
| 34) 63 ÷ 9 = <u>7</u> | 39) 14 ÷ 2 = <u>7</u> |
| 35) 12 ÷ 2 = <u>6</u> | 40) 81 ÷ 9 = <u>9</u> |

Time:

Score:

Dividing by 10, 100 or 1,000: 2 [B]

PROFESSOR PETE'S
CLASSROOM

x 10, 100, 1000

÷10, 100, 1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

- Nr 100

x5

x 50, 25

Revision

To ÷10, ÷100, ÷1,000: Use the number slide.

- ÷10 move the numbers 1 place. Which way? **Think!** The numbers need to get smaller! So which way?
- ÷100 move the numbers 2 places.
- ÷1,000 move the numbers 3 places.

$3,605 \div 10 = \underline{\quad}$

$78,040 \div 100 = \underline{\quad}$

$47,600 \div 1,000 = \underline{\quad}$

TTh Th, H T O . t

	3	,	6		0		5

÷10

TTh Th, H T O . t

7	8	,	0		4		0

÷100

TTh Th, H T O . t

4	7	,	6		0		0

÷1,000

		3		6		0	.	5

		7		8		0	.	4

				4		7	.	6

÷ 10, ÷ 100, ÷ 1000

1) $42,944 \div 10 = \underline{4,294.4}$

2) $2,590 \div 100 = \underline{25.9}$

3) $74,240 \div 100 = \underline{742.4}$

4) $18,200 \div 1,000 = \underline{18.2}$

5) $65,900 \div 10 = \underline{6,590}$

6) $70 \div 100 = \underline{0.7}$

7) $7,010 \div 100 = \underline{70.1}$

8) $3,770 \div 10 = \underline{377}$

9) $92,200 \div 1,000 = \underline{92.2}$

10) $13,212 \div 10 = \underline{1,321.2}$

11) $6 \div 10 = \underline{0.6}$

12) $22,490 \div 100 = \underline{224.9}$

13) $67,300 \div 1,000 = \underline{67.3}$

14) $1,760 \div 100 = \underline{17.6}$

15) $6,000 \div 10 = \underline{600}$

16) $90,000 \div 1,000 = \underline{90}$

17) $22,001 \div 10 = \underline{2,200.1}$

18) $5,710 \div 1,000 = \underline{5.71}$

19) $67,000 \div 1,000 = \underline{67}$

20) $4 \div 1,000 = \underline{0.004}$

Addition revision

21) $4 + 5 = \underline{9}$

24) $9 + 8 = \underline{17}$

22) $4 + 6 = \underline{10}$

25) $7 + 8 = \underline{15}$

23) $10 + 9 = \underline{19}$

26) $4 + 7 = \underline{11}$

Subtraction revision

33) $13 - 4 = \underline{9}$

36) $18 - 9 = \underline{9}$

34) $12 - 4 = \underline{8}$

37) $13 - 7 = \underline{6}$

35) $17 - 9 = \underline{8}$

38) $13 - 5 = \underline{8}$

Multiplication revision

27) $7 \times 8 = \underline{56}$

30) $6 \times 5 = \underline{30}$

28) $10 \times 5 = \underline{50}$

31) $7 \times 5 = \underline{35}$

29) $3 \times 6 = \underline{18}$

32) $5 \times 5 = \underline{25}$

Division revision

39) $24 \div 8 = \underline{3}$

42) $18 \div 9 = \underline{2}$

40) $54 \div 9 = \underline{6}$

43) $40 \div 5 = \underline{8}$

41) $56 \div 8 = \underline{7}$

44) $35 \div 7 = \underline{5}$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

Dividing by 10, 100 or 1,000: 2 [C]



x 10, 100, 1000	Doubling Lg	Nice Numbers	– Nr 100	x 50, 25
÷ 10, 100, 1000	Halving Lg	+ Nr 100	x5	Revision

To ÷10, ÷100, ÷1,000: Use the number slide.

- ÷10 move the numbers 1 place. Which way? **Think!** The numbers need to get smaller! So which way?
- ÷100 move the numbers 2 places.
- ÷1,000 move the numbers 3 places.

$460.2 \div 10 = \underline{\quad}$ <div style="display: flex; justify-content: space-around; font-weight: bold;">H T O . t h</div> <div style="display: flex; justify-content: space-around; border: 1px solid black; padding: 2px;"> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">6</div> <div style="border: 1px solid black; padding: 2px;">0</div> <div style="border: 1px solid black; padding: 2px;">.</div> <div style="border: 1px solid black; padding: 2px;">2</div> <div style="border: 1px solid black; padding: 2px;"> </div> </div> <div style="text-align: right; margin-right: 10px;">÷10</div> <div style="display: flex; justify-content: space-around; border: 1px solid black; padding: 2px;"> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">6</div> <div style="border: 1px solid black; padding: 2px;">.</div> <div style="border: 1px solid black; padding: 2px;">0</div> <div style="border: 1px solid black; padding: 2px;">2</div> </div>	$570 \div 100 = \underline{\quad}$ <div style="display: flex; justify-content: space-around; font-weight: bold;">H T O . t h</div> <div style="display: flex; justify-content: space-around; border: 1px solid black; padding: 2px;"> <div style="border: 1px solid black; padding: 2px;">5</div> <div style="border: 1px solid black; padding: 2px;">7</div> <div style="border: 1px solid black; padding: 2px;">0</div> <div style="border: 1px solid black; padding: 2px;">.</div> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border: 1px solid black; padding: 2px;"> </div> </div> <div style="text-align: right; margin-right: 10px;">÷100</div> <div style="display: flex; justify-content: space-around; border: 1px solid black; padding: 2px;"> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border: 1px solid black; padding: 2px;">5</div> <div style="border: 1px solid black; padding: 2px;">.</div> <div style="border: 1px solid black; padding: 2px;">7</div> <div style="border: 1px solid black; padding: 2px;"> </div> </div>	$841 \div 1,000 = \underline{\quad}$ <div style="display: flex; justify-content: space-around; font-weight: bold;">H T O . t h th</div> <div style="display: flex; justify-content: space-around; border: 1px solid black; padding: 2px;"> <div style="border: 1px solid black; padding: 2px;">8</div> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">1</div> <div style="border: 1px solid black; padding: 2px;">.</div> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border: 1px solid black; padding: 2px;"> </div> </div> <div style="text-align: right; margin-right: 10px;">÷1,000</div> <div style="display: flex; justify-content: space-around; border: 1px solid black; padding: 2px;"> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border: 1px solid black; padding: 2px;"> </div> <div style="border: 1px solid black; padding: 2px;">0</div> <div style="border: 1px solid black; padding: 2px;">.</div> <div style="border: 1px solid black; padding: 2px;">8</div> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">1</div> </div>
--	--	---

÷ 10, ÷ 100, ÷ 1000

- | | |
|---|--|
| 1) $572 \div 10 = \underline{57.2}$ | 11) $7.01 \div 10 = \underline{0.701}$ |
| 2) $504 \div 1,000 = \underline{0.504}$ | 12) $604 \div 100 = \underline{6.04}$ |
| 3) $283 \div 100 = \underline{2.83}$ | 13) $488.9 \div 100 = \underline{4.889}$ |
| 4) $90.5 \div 10 = \underline{9.05}$ | 14) $805 \div 1,000 = \underline{0.805}$ |
| 5) $992 \div 100 = \underline{9.92}$ | 15) $940 \div 100 = \underline{9.4}$ |
| 6) $7 \div 100 = \underline{0.07}$ | 16) $456.6 \div 100 = \underline{4.566}$ |
| 7) $172 \div 1,000 = \underline{0.172}$ | 17) $7,917 \div 1,000 = \underline{7.917}$ |
| 8) $790 \div 10 = \underline{79}$ | 18) $56 \div 1,000 = \underline{0.056}$ |
| 9) $900 \div 1,000 = \underline{0.9}$ | 19) $490 \div 100 = \underline{4.9}$ |
| 10) $740 \div 1,000 = \underline{0.74}$ | 20) $8 \div 1,000 = \underline{0.008}$ |

Addition revision

- | | |
|------------------------------|------------------------------|
| 21) $8 + 9 = \underline{17}$ | 24) $3 + 4 = \underline{7}$ |
| 22) $8 + 8 = \underline{16}$ | 25) $9 + 7 = \underline{16}$ |
| 23) $5 + 4 = \underline{9}$ | 26) $2 + 8 = \underline{10}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 33) $15 - 9 = \underline{6}$ | 36) $7 - 2 = \underline{5}$ |
| 34) $5 - 3 = \underline{2}$ | 37) $14 - 7 = \underline{7}$ |
| 35) $12 - 5 = \underline{7}$ | 38) $15 - 8 = \underline{7}$ |

Multiplication revision

- | | |
|-----------------------------------|-----------------------------------|
| 27) $2 \times 3 = \underline{6}$ | 30) $4 \times 5 = \underline{20}$ |
| 28) $9 \times 8 = \underline{72}$ | 31) $9 \times 7 = \underline{63}$ |
| 29) $9 \times 2 = \underline{18}$ | 32) $8 \times 3 = \underline{24}$ |

Division revision

- | | |
|---------------------------------|---------------------------------|
| 39) $72 \div 9 = \underline{8}$ | 42) $45 \div 5 = \underline{9}$ |
| 40) $42 \div 6 = \underline{7}$ | 43) $12 \div 2 = \underline{6}$ |
| 41) $16 \div 4 = \underline{4}$ | 44) $63 \div 7 = \underline{9}$ |

Time:

Score:

Dividing by 10, 100 or 1,000: 2 [D]



x 10, 100, 1000 ÷ 10, 100, 1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	– Nr 100 x5	x 50, 25 Revision
------------------------------------	---------------------------	--------------------------	----------------	----------------------

÷ 10, ÷ 100, ÷ 1000

- | | |
|--|---|
| 1) $3,783 \div 10 = \underline{378.3}$ | 13) $40,067 \div 10 = \underline{4,006.7}$ |
| 2) $5,463 \div 100 = \underline{54.63}$ | 14) $41 \div 1,000 = \underline{0.041}$ |
| 3) $500 \div 1,000 = \underline{0.5}$ | 15) $2 \div 100 = \underline{0.02}$ |
| 4) $685.3 \div 100 = \underline{6.853}$ | 16) $30,783 \div 100 = \underline{307.83}$ |
| 5) $8,079 \div 100 = \underline{80.79}$ | 17) $8,307.6 \div 100 = \underline{83.076}$ |
| 6) $80 \div 1,000 = \underline{0.08}$ | 18) $60 \div 100 = \underline{0.6}$ |
| 7) $1 \div 1,000 = \underline{0.001}$ | 19) $50,005 \div 100 = \underline{500.05}$ |
| 8) $8,060 \div 10 = \underline{806}$ | 20) $90,600 \div 100 = \underline{906}$ |
| 9) $8.88 \div 10 = \underline{0.888}$ | 21) $76,800 \div 100 = \underline{768}$ |
| 10) $4,006 \div 1,000 = \underline{4.006}$ | 22) $30,000 \div 10 = \underline{3,000}$ |
| 11) $2,687 \div 10 = \underline{268.7}$ | 23) $307 \div 1,000 = \underline{0.307}$ |
| 12) $3,652 \div 100 = \underline{36.52}$ | 24) $69,000 \div 100 = \underline{690}$ |

Addition revision

- | | |
|------------------------------|-------------------------------|
| 25) $7 + 8 = \underline{15}$ | 30) $1 + 5 = \underline{6}$ |
| 26) $3 + 9 = \underline{12}$ | 31) $10 + 9 = \underline{19}$ |
| 27) $8 + 7 = \underline{15}$ | 32) $1 + 7 = \underline{8}$ |
| 28) $8 + 8 = \underline{16}$ | 33) $3 + 8 = \underline{11}$ |
| 29) $4 + 7 = \underline{11}$ | 34) $5 + 8 = \underline{13}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 45) $17 - 9 = \underline{8}$ | 50) $10 - 4 = \underline{6}$ |
| 46) $11 - 8 = \underline{3}$ | 51) $15 - 7 = \underline{8}$ |
| 47) $5 - 2 = \underline{3}$ | 52) $7 - 4 = \underline{3}$ |
| 48) $7 - 5 = \underline{2}$ | 53) $12 - 8 = \underline{4}$ |
| 49) $12 - 5 = \underline{7}$ | 54) $13 - 6 = \underline{7}$ |

Multiplication revision

- | | |
|------------------------------------|-----------------------------------|
| 35) $10 \times 3 = \underline{30}$ | 40) $4 \times 4 = \underline{16}$ |
| 36) $9 \times 2 = \underline{18}$ | 41) $8 \times 2 = \underline{16}$ |
| 37) $9 \times 5 = \underline{45}$ | 42) $7 \times 9 = \underline{63}$ |
| 38) $9 \times 4 = \underline{36}$ | 43) $6 \times 3 = \underline{18}$ |
| 39) $2 \times 2 = \underline{4}$ | 44) $4 \times 2 = \underline{8}$ |

Division revision

- | | |
|---------------------------------|----------------------------------|
| 55) $48 \div 6 = \underline{8}$ | 60) $30 \div 3 = \underline{10}$ |
| 56) $54 \div 6 = \underline{9}$ | 61) $12 \div 6 = \underline{2}$ |
| 57) $16 \div 8 = \underline{2}$ | 62) $36 \div 9 = \underline{4}$ |
| 58) $63 \div 7 = \underline{9}$ | 63) $12 \div 3 = \underline{4}$ |
| 59) $21 \div 7 = \underline{3}$ | 64) $18 \div 9 = \underline{2}$ |

Time:

Score:

Doubling 2-digit Numbers: 3 [A]


 x 10, 100, 1000
 ÷ 10, 100, 1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

– Nr 100

x5

 x 50, 25
 Revision
Doubling 2-digit numbers

Double both places, starting with the tens.

For example, Double 23: double the 2 (tens), double the 3: 4 tens + 6 = 46.

Doubling without regrouping

- | | | | |
|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|
| 1) $42 \times 2 = \underline{84}$ | 6) $32 \times 2 = \underline{64}$ | 11) $24 \times 2 = \underline{48}$ | 16) $32 \times 2 = \underline{64}$ |
| 2) $34 \times 2 = \underline{68}$ | 7) $14 \times 2 = \underline{28}$ | 12) $23 \times 2 = \underline{46}$ | 17) $24 \times 2 = \underline{48}$ |
| 3) $41 \times 2 = \underline{82}$ | 8) $20 \times 2 = \underline{40}$ | 13) $13 \times 2 = \underline{26}$ | 18) $12 \times 2 = \underline{24}$ |
| 4) $24 \times 2 = \underline{48}$ | 9) $43 \times 2 = \underline{86}$ | 14) $21 \times 2 = \underline{42}$ | 19) $40 \times 2 = \underline{80}$ |
| 5) $31 \times 2 = \underline{62}$ | 10) $22 \times 2 = \underline{44}$ | 15) $34 \times 2 = \underline{68}$ | 20) $30 \times 2 = \underline{60}$ |

Doubling 2-digit numbers with regrouping

Start by doubling the tens. For example, Double 46: double 4 = 8. Try to remember this number. If you need to, you can write the 8 very lightly until you have doubled the ones."

Now double the ones: double 6 = 12. Add the ten to the 8 tens, write "9" (if you wrote "8" softly, write over it with "9"). Then record the remaining ones, "2". Double 46 = 92.

Doubling with regrouping

- | | | | |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| 21) $17 \times 2 = \underline{34}$ | 26) $24 \times 2 = \underline{48}$ | 31) $16 \times 2 = \underline{32}$ | 36) $21 \times 2 = \underline{42}$ |
| 22) $39 \times 2 = \underline{78}$ | 27) $38 \times 2 = \underline{76}$ | 32) $10 \times 2 = \underline{20}$ | 37) $17 \times 2 = \underline{34}$ |
| 23) $26 \times 2 = \underline{52}$ | 28) $12 \times 2 = \underline{24}$ | 33) $20 \times 2 = \underline{40}$ | 38) $13 \times 2 = \underline{26}$ |
| 24) $21 \times 2 = \underline{42}$ | 29) $14 \times 2 = \underline{28}$ | 34) $42 \times 2 = \underline{84}$ | 39) $34 \times 2 = \underline{68}$ |
| 25) $27 \times 2 = \underline{54}$ | 30) $28 \times 2 = \underline{56}$ | 35) $46 \times 2 = \underline{92}$ | 40) $43 \times 2 = \underline{86}$ |

x10, x100 or x1000, including decimals

- | | |
|--|--|
| 41) $6.3 \times 1,000 = \underline{6,300.0}$ | 46) $64.0 \times 10 = \underline{640.0}$ |
| 42) $39.5 \times 10 = \underline{395.0}$ | 47) $126 \times 1,000 = \underline{126,000}$ |
| 43) $102 \times 10 = \underline{1,020}$ | 48) $46.1 \times 100 = \underline{4,610.0}$ |
| 44) $949 \times 100 = \underline{94,900}$ | 49) $878 \times 1,000 = \underline{878,000}$ |
| 45) $497 \times 100 = \underline{49,700}$ | 50) $7.2 \times 10 = \underline{72.0}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".

Time:

Score:

Doubling 2-digit Numbers: 3 [B]



x 10, 100, 1000 ÷ 10, 100, 1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	– Nr 100 x5	x 50, 25 Revision
------------------------------------	----------------------------------	--------------------------	----------------	----------------------

Doubling 2-digit numbers

Double both places, starting with the tens.

For example, Double 23: double the 2 (tens), double the 3: 4 tens + 6 = 46.

Doubling without regrouping

- | | | | |
|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1) $24 \times 2 = \underline{48}$ | 6) $44 \times 2 = \underline{88}$ | 11) $13 \times 2 = \underline{26}$ | 16) $83 \times 2 = \underline{166}$ |
| 2) $54 \times 2 = \underline{108}$ | 7) $72 \times 2 = \underline{144}$ | 12) $54 \times 2 = \underline{108}$ | 17) $30 \times 2 = \underline{60}$ |
| 3) $73 \times 2 = \underline{146}$ | 8) $42 \times 2 = \underline{84}$ | 13) $20 \times 2 = \underline{40}$ | 18) $32 \times 2 = \underline{64}$ |
| 4) $71 \times 2 = \underline{142}$ | 9) $91 \times 2 = \underline{182}$ | 14) $50 \times 2 = \underline{100}$ | 19) $93 \times 2 = \underline{186}$ |
| 5) $12 \times 2 = \underline{24}$ | 10) $63 \times 2 = \underline{126}$ | 15) $81 \times 2 = \underline{162}$ | 20) $64 \times 2 = \underline{128}$ |

Doubling 2-digit numbers with regrouping

Start with the hundreds, then double the tens and the ones. If regrouping is required, try to remember that the extra one is needed without writing it down. If needed, each digit can be written lightly, so that if regrouping is needed, the digit can be overwritten with the new value, as on worksheet 3[A]. Some of these questions will require extra time to reach the answer.

Doubling with regrouping

- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 21) $46 \times 2 = \underline{92}$ | 26) $72 \times 2 = \underline{144}$ | 31) $62 \times 2 = \underline{124}$ | 36) $25 \times 2 = \underline{50}$ |
| 22) $87 \times 2 = \underline{174}$ | 27) $67 \times 2 = \underline{134}$ | 32) $98 \times 2 = \underline{196}$ | 37) $47 \times 2 = \underline{94}$ |
| 23) $68 \times 2 = \underline{136}$ | 28) $46 \times 2 = \underline{92}$ | 33) $54 \times 2 = \underline{108}$ | 38) $75 \times 2 = \underline{150}$ |
| 24) $38 \times 2 = \underline{76}$ | 29) $19 \times 2 = \underline{38}$ | 34) $49 \times 2 = \underline{98}$ | 39) $38 \times 2 = \underline{76}$ |
| 25) $75 \times 2 = \underline{150}$ | 30) $87 \times 2 = \underline{174}$ | 35) $26 \times 2 = \underline{52}$ | 40) $97 \times 2 = \underline{194}$ |

x10, x100 or x1000, including decimals

- | | |
|--|--|
| 41) $6.3 \times 1,000 = \underline{6,300.0}$ | 46) $64.0 \times 10 = \underline{640.0}$ |
| 42) $39.5 \times 10 = \underline{395.0}$ | 47) $126 \times 1,000 = \underline{126,000}$ |
| 43) $102 \times 10 = \underline{1,020}$ | 48) $46.1 \times 100 = \underline{4,610.0}$ |
| 44) $949 \times 100 = \underline{94,900}$ | 49) $878 \times 1,000 = \underline{878,000}$ |
| 45) $497 \times 100 = \underline{49,700}$ | 50) $7.2 \times 10 = \underline{72.0}$ |

Time:

Score:

Doubling 3-digit Numbers: 3 [C]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	– Nr 100 x5	x 50,25 Revision
-------------------------------	----------------------------------	--------------------------	----------------	---------------------

Doubling 3-digit numbers

Double each place in turn, starting with hundreds, then tens and ones.

For example, Double 431: double 4 (hundreds) + double 3 (tens) + double 1 (one) = 8 hundreds + 6 tens + 2 ones = 862.

Doubling without regrouping

- | | | | |
|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| 1) $242 \times 2 = \underline{484}$ | 6) $122 \times 2 = \underline{244}$ | 11) $422 \times 2 = \underline{844}$ | 16) $312 \times 2 = \underline{624}$ |
| 2) $434 \times 2 = \underline{868}$ | 7) $414 \times 2 = \underline{828}$ | 12) $203 \times 2 = \underline{406}$ | 17) $124 \times 2 = \underline{248}$ |
| 3) $411 \times 2 = \underline{822}$ | 8) $220 \times 2 = \underline{440}$ | 13) $343 \times 2 = \underline{686}$ | 18) $243 \times 2 = \underline{486}$ |
| 4) $234 \times 2 = \underline{468}$ | 9) $403 \times 2 = \underline{806}$ | 14) $241 \times 2 = \underline{482}$ | 19) $240 \times 2 = \underline{480}$ |
| 5) $341 \times 2 = \underline{682}$ | 10) $212 \times 2 = \underline{424}$ | 15) $304 \times 2 = \underline{608}$ | 20) $330 \times 2 = \underline{660}$ |

Doubling 3-digit numbers with regrouping

Start with the hundreds, then double the tens and the ones. If regrouping is required, try to remember that the extra one is needed without writing it down. If needed, each digit can be written lightly, so that if regrouping is needed, the digit can be overwritten with the new value, as on worksheet 3[A]. Some of these questions will require extra time to reach the answer.

Doubling with regrouping

- | | | | |
|--------------------------------------|--|--|--|
| 21) $146 \times 2 = \underline{292}$ | 26) $322 \times 2 = \underline{644}$ | 31) $522 \times 2 = \underline{1,044}$ | 36) $831 \times 2 = \underline{1,662}$ |
| 22) $437 \times 2 = \underline{874}$ | 27) $435 \times 2 = \underline{870}$ | 32) $418 \times 2 = \underline{836}$ | 37) $247 \times 2 = \underline{494}$ |
| 23) $248 \times 2 = \underline{496}$ | 28) $616 \times 2 = \underline{1,232}$ | 33) $634 \times 2 = \underline{1,268}$ | 38) $835 \times 2 = \underline{1,670}$ |
| 24) $138 \times 2 = \underline{276}$ | 29) $219 \times 2 = \underline{438}$ | 34) $349 \times 2 = \underline{698}$ | 39) $630 \times 2 = \underline{1,260}$ |
| 25) $225 \times 2 = \underline{450}$ | 30) $427 \times 2 = \underline{854}$ | 35) $723 \times 2 = \underline{1,446}$ | 40) $207 \times 2 = \underline{414}$ |

Multiplication

- | | |
|------------------------------------|------------------------------------|
| 41) $5 \times 5 = \underline{25}$ | 46) $8 \times 6 = \underline{48}$ |
| 42) $8 \times 9 = \underline{72}$ | 47) $9 \times 9 = \underline{81}$ |
| 43) $10 \times 7 = \underline{70}$ | 48) $8 \times 5 = \underline{40}$ |
| 44) $9 \times 4 = \underline{36}$ | 49) $6 \times 6 = \underline{36}$ |
| 45) $6 \times 9 = \underline{54}$ | 50) $10 \times 6 = \underline{60}$ |

Division

- | | |
|----------------------------------|----------------------------------|
| 51) $32 \div 4 = \underline{8}$ | 56) $40 \div 4 = \underline{10}$ |
| 52) $16 \div 4 = \underline{4}$ | 57) $90 \div 9 = \underline{10}$ |
| 53) $64 \div 8 = \underline{8}$ | 58) $24 \div 6 = \underline{4}$ |
| 54) $70 \div 7 = \underline{10}$ | 59) $36 \div 9 = \underline{4}$ |
| 55) $48 \div 8 = \underline{6}$ | 60) $28 \div 7 = \underline{4}$ |

Time:

Score:

Doubling 3-digit Numbers: 3 [D]



$\times 10, 100, 1000$	Doubling Lg	Nice Numbers	– Nr 100	$\times 50, 25$
$\div 10, 100, 1000$	Halving Lg	+ Nr 100	$\times 5$	Revision

Doubling 3-digit numbers with regrouping

Start with the hundreds, then the tens and the ones.

Write digits lightly as you double them if you cannot remember them all.

Double these numbers

- | | | |
|---------------------------------------|--|--|
| 1) $288 \times 2 = \underline{576}$ | 6) $105 \times 2 = \underline{210}$ | 11) $484 \times 2 = \underline{968}$ |
| 2) $852 \times 2 = \underline{1,704}$ | 7) $196 \times 2 = \underline{392}$ | 12) $909 \times 2 = \underline{1,818}$ |
| 3) $925 \times 2 = \underline{1,850}$ | 8) $515 \times 2 = \underline{1,030}$ | 13) $734 \times 2 = \underline{1,468}$ |
| 4) $714 \times 2 = \underline{1,428}$ | 9) $382 \times 2 = \underline{764}$ | 14) $850 \times 2 = \underline{1,700}$ |
| 5) $837 \times 2 = \underline{1,674}$ | 10) $643 \times 2 = \underline{1,286}$ | 15) $825 \times 2 = \underline{1,650}$ |

 $\times 10, \times 100$ or $\times 1000$, including decimals

- | | |
|--|--|
| 16) $36.0 \times 1,000 = \underline{36,000.0}$ | 21) $55.9 \times 1,000 = \underline{55,900.0}$ |
| 17) $34 \times 100 = \underline{3,400}$ | 22) $0.299 \times 1,000 = \underline{299.000}$ |
| 18) $9.31 \times 1,000 = \underline{9,310.00}$ | 23) $9.95 \times 100 = \underline{995.00}$ |
| 19) $578 \times 1,000 = \underline{578,000}$ | 24) $3.76 \times 100 = \underline{376.00}$ |
| 20) $4.65 \times 10 = \underline{46.50}$ | 25) $290 \times 100 = \underline{29,000}$ |

Divide these numbers

- | | |
|--|---|
| 26) $2,391 \div 10 = \underline{239.1}$ | 31) $19,420 \div 1,000 = \underline{19.42}$ |
| 27) $7,796 \div 100 = \underline{77.96}$ | 32) $158.94 \div 10 = \underline{15.894}$ |
| 28) $146.1 \div 100 = \underline{1.461}$ | 33) $86,494 \div 100 = \underline{864.94}$ |
| 29) $1,171 \div 1,000 = \underline{1.171}$ | 34) $57,471 \div 10 = \underline{5,747.1}$ |
| 30) $1,548 \div 10 = \underline{154.8}$ | 35) $2,202.4 \div 100 = \underline{22.024}$ |

Addition revision

- | | |
|-------------------------------|------------------------------|
| 36) $6 + 8 = \underline{14}$ | 40) $9 + 4 = \underline{13}$ |
| 37) $10 + 8 = \underline{18}$ | 41) $3 + 6 = \underline{9}$ |
| 38) $10 + 9 = \underline{19}$ | 42) $5 + 7 = \underline{12}$ |
| 39) $3 + 7 = \underline{10}$ | 43) $8 + 4 = \underline{12}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 44) $16 - 7 = \underline{9}$ | 48) $10 - 4 = \underline{6}$ |
| 45) $12 - 3 = \underline{9}$ | 49) $17 - 9 = \underline{8}$ |
| 46) $9 - 2 = \underline{7}$ | 50) $17 - 8 = \underline{9}$ |
| 47) $14 - 9 = \underline{5}$ | 51) $15 - 7 = \underline{8}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Halving 2-digit Numbers: 4 [A]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Halving 2-digit numbers

Being able to halve a number is often useful, for example when simplifying common fractions, Sharing money etc.

Halving 2-digit numbers without regrouping

Halve the tens, then halve the ones.

For example, halve 48: Half 4 (tens) + half 8 (ones) = 2 tens + 4 ones = 24.

Halve these numbers

- | | | | |
|---------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 1) $23 \div 2 = \underline{11}$ | 2) $46 \div 2 = \underline{23}$ | 11) $82 \div 2 = \underline{41}$ | 12) $66 \div 2 = \underline{33}$ |
| 3) $22 \div 2 = \underline{11}$ | 4) $60 \div 2 = \underline{30}$ | 13) $26 \div 2 = \underline{13}$ | 14) $84 \div 2 = \underline{42}$ |
| 5) $12 \div 2 = \underline{6}$ | 6) $22 \div 2 = \underline{11}$ | 15) $42 \div 2 = \underline{21}$ | 16) $22 \div 2 = \underline{11}$ |
| 7) $44 \div 2 = \underline{22}$ | 8) $68 \div 2 = \underline{34}$ | 17) $88 \div 2 = \underline{44}$ | 18) $80 \div 2 = \underline{40}$ |
| 9) $24 \div 2 = \underline{12}$ | 10) $30 \div 2 = \underline{15}$ | 19) $20 \div 2 = \underline{10}$ | 20) $24 \div 2 = \underline{12}$ |

Halving 2-digit numbers with regrouping

Start with the tens, then the ones. If there is an odd number of tens, take half of the number one less, then add ten to the ones for halving. For example, halve 74: half 6 (tens) + half 14 (ones) = 3 tens + 7 ones = 37.

Halve these numbers

- | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 21) $76 \div 2 = \underline{38}$ | 22) $72 \div 2 = \underline{36}$ | 31) $76 \div 2 = \underline{38}$ | 32) $96 \div 2 = \underline{48}$ |
| 23) $54 \div 2 = \underline{27}$ | 24) $32 \div 2 = \underline{16}$ | 33) $36 \div 2 = \underline{18}$ | 34) $52 \div 2 = \underline{26}$ |
| 25) $38 \div 2 = \underline{19}$ | 26) $46 \div 2 = \underline{23}$ | 35) $58 \div 2 = \underline{29}$ | 36) $54 \div 2 = \underline{27}$ |
| 27) $36 \div 2 = \underline{18}$ | 28) $52 \div 2 = \underline{26}$ | 37) $34 \div 2 = \underline{17}$ | 38) $62 \div 2 = \underline{31}$ |
| 29) $84 \div 2 = \underline{42}$ | 30) $62 \div 2 = \underline{31}$ | 39) $72 \div 2 = \underline{36}$ | 40) $56 \div 2 = \underline{28}$ |

Double these numbers

- | | | |
|--|--------------------------------------|--|
| 41) $281 \times 2 = \underline{562}$ | 45) $218 \times 2 = \underline{436}$ | 49) $749 \times 2 = \underline{1,498}$ |
| 42) $721 \times 2 = \underline{1,442}$ | 46) $380 \times 2 = \underline{760}$ | 50) $752 \times 2 = \underline{1,504}$ |
| 43) $737 \times 2 = \underline{1,474}$ | 47) $444 \times 2 = \underline{888}$ | 51) $476 \times 2 = \underline{952}$ |
| 44) $714 \times 2 = \underline{1,428}$ | 48) $299 \times 2 = \underline{598}$ | 52) $534 \times 2 = \underline{1,068}$ |

Time:

Score:

Halving 2-digit Numbers: 4 [B]



x 10, 100, 1000	Doubling Lg	Nice Numbers	– Nr 100	x 50, 25
÷ 10, 100, 1000	Halving Lg	+ Nr 100	x5	Revision

Halving 2-digit numbers with regrouping

Start with the tens, then the ones. If there is an odd number of tens, take half of the number one less, then add ten to the ones for halving. For example, halve 74: half 6 (tens) + half 14 (ones) = 3 tens + 7 ones = 37.

Halve these numbers

- | | | | |
|---------------------|----------------------|----------------------|----------------------|
| 1) $30 \div 2 = 15$ | 2) $84 \div 2 = 42$ | 11) $64 \div 2 = 32$ | 12) $38 \div 2 = 19$ |
| 3) $74 \div 2 = 37$ | 4) $26 \div 2 = 13$ | 13) $26 \div 2 = 13$ | 14) $78 \div 2 = 39$ |
| 5) $98 \div 2 = 49$ | 6) $34 \div 2 = 17$ | 15) $72 \div 2 = 36$ | 16) $70 \div 2 = 35$ |
| 7) $52 \div 2 = 26$ | 8) $96 \div 2 = 48$ | 17) $54 \div 2 = 27$ | 18) $82 \div 2 = 41$ |
| 9) $50 \div 2 = 25$ | 10) $72 \div 2 = 36$ | 19) $72 \div 2 = 36$ | 20) $40 \div 2 = 20$ |

x10, x100 or x1000, including decimals

- | | |
|------------------------------------|------------------------------------|
| 21) $281 \times 10 = 2,810$ | 26) $2.90 \times 10 = 29.00$ |
| 22) $7.62 \times 1,000 = 7,620.00$ | 27) $1.08 \times 1,000 = 1,080.00$ |
| 23) $41.8 \times 10 = 418.0$ | 28) $2.14 \times 10 = 21.40$ |
| 24) $71.3 \times 10 = 713.0$ | 29) $0.704 \times 100 = 70.400$ |
| 25) $899 \times 1,000 = 899,000$ | 30) $0.25 \times 100 = 25.00$ |

Double these numbers

- | | | |
|----------------------------|--------------------------|----------------------------|
| 31) $128 \times 2 = 256$ | 35) $113 \times 2 = 226$ | 39) $271 \times 2 = 542$ |
| 32) $826 \times 2 = 1,652$ | 36) $288 \times 2 = 576$ | 40) $933 \times 2 = 1,866$ |
| 33) $361 \times 2 = 722$ | 37) $131 \times 2 = 262$ | 41) $620 \times 2 = 1,240$ |
| 34) $952 \times 2 = 1,904$ | 38) $425 \times 2 = 850$ | 42) $430 \times 2 = 860$ |

Addition revision

- | | |
|-------------------|-------------------|
| 43) $7 + 4 = 11$ | 48) $9 + 7 = 16$ |
| 44) $10 + 4 = 14$ | 49) $10 + 7 = 17$ |
| 45) $4 + 6 = 10$ | 50) $6 + 8 = 14$ |
| 46) $4 + 4 = 8$ | 51) $8 + 4 = 12$ |
| 47) $3 + 6 = 9$ | 52) $9 + 8 = 17$ |

Subtraction revision

- | | |
|------------------|------------------|
| 53) $17 - 9 = 8$ | 58) $10 - 5 = 5$ |
| 54) $16 - 8 = 8$ | 59) $12 - 4 = 8$ |
| 55) $17 - 8 = 9$ | 60) $8 - 2 = 6$ |
| 56) $14 - 5 = 9$ | 61) $9 - 2 = 7$ |
| 57) $7 - 2 = 5$ | 62) $11 - 5 = 6$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Halving 3-digit Numbers: 4 [C]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Halving 3-digit numbers

Being able to halve a number is often useful, for example when simplifying common fractions, sharing money etc.

Halving 3-digit numbers without regrouping

Halve the hundreds, halve the tens, then halve the ones.

For example, halve 248: Half 2 (hundreds) + half 4 (tens) + half 8 (ones) = 1 hundred + 2 tens + 4 ones = 124.

Halving 3-digit numbers without regrouping

- | | | | |
|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|
| 1) $628 \div 2 = \underline{314}$ | 2) $426 \div 2 = \underline{213}$ | 11) $604 \div 2 = \underline{302}$ | 12) $646 \div 2 = \underline{323}$ |
| 3) $284 \div 2 = \underline{142}$ | 4) $624 \div 2 = \underline{312}$ | 13) $482 \div 2 = \underline{241}$ | 14) $288 \div 2 = \underline{144}$ |
| 5) $404 \div 2 = \underline{202}$ | 6) $262 \div 2 = \underline{131}$ | 15) $842 \div 2 = \underline{421}$ | 16) $442 \div 2 = \underline{221}$ |
| 7) $822 \div 2 = \underline{411}$ | 8) $840 \div 2 = \underline{420}$ | 17) $244 \div 2 = \underline{122}$ | 18) $602 \div 2 = \underline{301}$ |
| 9) $448 \div 2 = \underline{224}$ | 10) $240 \div 2 = \underline{120}$ | 19) $828 \div 2 = \underline{414}$ | 20) $420 \div 2 = \underline{210}$ |

Halving 3-digit numbers with regrouping

When a number has a “1” digit, group it with the next digit for halving. For example, halve 184: this number has 18 tens, which can be halved, and 4 ones. Half 184 = 92.

Halving 3-digit numbers with regrouping

- | | | | |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| 21) $128 \div 2 = \underline{64}$ | 22) $128 \div 2 = \underline{64}$ | 31) $812 \div 2 = \underline{406}$ | 32) $820 \div 2 = \underline{410}$ |
| 23) $610 \div 2 = \underline{305}$ | 24) $870 \div 2 = \underline{435}$ | 33) $614 \div 2 = \underline{307}$ | 34) $104 \div 2 = \underline{52}$ |
| 25) $188 \div 2 = \underline{94}$ | 26) $108 \div 2 = \underline{54}$ | 35) $408 \div 2 = \underline{204}$ | 36) $130 \div 2 = \underline{65}$ |
| 27) $414 \div 2 = \underline{207}$ | 28) $162 \div 2 = \underline{81}$ | 37) $650 \div 2 = \underline{325}$ | 38) $814 \div 2 = \underline{407}$ |
| 29) $816 \div 2 = \underline{408}$ | 30) $124 \div 2 = \underline{62}$ | 39) $410 \div 2 = \underline{205}$ | 40) $128 \div 2 = \underline{64}$ |

Doubling 3-digit numbers with regrouping

- | | | |
|--|--|--------------------------------------|
| 41) $361 \times 2 = \underline{722}$ | 45) $113 \times 2 = \underline{226}$ | 49) $128 \times 2 = \underline{256}$ |
| 42) $271 \times 2 = \underline{542}$ | 46) $942 \times 2 = \underline{1,884}$ | 50) $131 \times 2 = \underline{262}$ |
| 43) $933 \times 2 = \underline{1,866}$ | 47) $826 \times 2 = \underline{1,652}$ | 51) $425 \times 2 = \underline{850}$ |
| 44) $620 \times 2 = \underline{1,240}$ | 48) $282 \times 2 = \underline{564}$ | 52) $430 \times 2 = \underline{860}$ |

Time:

Score:

Halving 3-digit Numbers: 4 [D]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Halve these numbers

- 1) $326 \div 2 = 163$ 2) $490 \div 2 = 245$ 11) $740 \div 2 = 370$ 12) $148 \div 2 = 74$
 3) $706 \div 2 = 353$ 4) $308 \div 2 = 154$ 13) $314 \div 2 = 157$ 14) $704 \div 2 = 352$
 5) $816 \div 2 = 408$ 6) $154 \div 2 = 77$ 15) $274 \div 2 = 137$ 16) $726 \div 2 = 363$
 7) $888 \div 2 = 444$ 8) $606 \div 2 = 303$ 17) $948 \div 2 = 474$ 18) $170 \div 2 = 85$
 9) $130 \div 2 = 65$ 10) $524 \div 2 = 262$ 19) $820 \div 2 = 410$ 20) $944 \div 2 = 472$

÷ 10, ÷ 100, ÷ 1000

- 21) $3,474 \div 1,000 = 3.474$ 26) $691 \div 1,000 = 0.691$
 22) $4,601 \div 10 = 460.1$ 27) $938 \div 10 = 93.8$
 23) $861 \div 100 = 8.61$ 28) $78,000 \div 100 = 780$
 24) $2,766 \div 100 = 27.66$ 29) $60,270 \div 1,000 = 60.27$
 25) $2,696 \div 10 = 269.6$ 30) $12,904 \div 10 = 1,290.4$

Double these numbers

- 31) $115 \times 2 = 230$ 35) $882 \times 2 = 1,764$ 39) $117 \times 2 = 234$
 32) $304 \times 2 = 608$ 36) $775 \times 2 = 1,550$ 40) $419 \times 2 = 838$
 33) $526 \times 2 = 1,052$ 37) $469 \times 2 = 938$ 41) $710 \times 2 = 1,420$
 34) $922 \times 2 = 1,844$ 38) $133 \times 2 = 266$ 42) $535 \times 2 = 1,070$

Addition revision

- 43) $3 + 9 = 12$ 48) $8 + 6 = 14$
 44) $3 + 5 = 8$ 49) $10 + 6 = 16$
 45) $5 + 8 = 13$ 50) $9 + 8 = 17$
 46) $9 + 9 = 18$ 51) $4 + 6 = 10$
 47) $10 + 7 = 17$ 52) $8 + 8 = 16$

Subtraction revision

- 53) $13 - 5 = 8$ 58) $12 - 5 = 7$
 54) $16 - 8 = 8$ 59) $17 - 8 = 9$
 55) $13 - 7 = 6$ 60) $11 - 6 = 5$
 56) $13 - 8 = 5$ 61) $17 - 9 = 8$
 57) $15 - 8 = 7$ 62) $9 - 1 = 8$

Time:

Score:

Adding "Nice" Numbers: 5 [A]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Adding pairs of “nice” numbers:

When mentally adding a set of numbers, proficient thinkers will look for numbers which add easily together. These pairs will usually be two numbers whose sum is 10 or 100.

Cross off the numbers as they are added so as not to get confused.

For example: $\cancel{7} + 6 + \cancel{8} + \cancel{2} + \cancel{3} = 20 + 6 = 26$

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|---|--|
| 1) $7 + 3 + 8 + 2 + 8 = \underline{28}$ | 2) $2 + 8 + 7 + 3 + 7 = \underline{27}$ |
| 3) $5 + 1 + 5 + 1 + 9 = \underline{21}$ | 4) $6 + 2 + 9 + 8 + 4 = \underline{29}$ |
| 5) $1 + 8 + 9 + 2 + 9 = \underline{29}$ | 6) $60 + 50 + 40 + 50 + 30 = \underline{230}$ |
| 7) $5 + 1 + 8 + 5 + 2 = \underline{21}$ | 8) $90 + 10 + 80 + 40 + 20 = \underline{240}$ |
| 9) $3 + 7 + 5 + 1 + 9 = \underline{25}$ | 10) $50 + 70 + 50 + 30 + 20 = \underline{220}$ |

Halve these numbers

- | | | |
|------------------------------------|------------------------------------|------------------------------------|
| 11) $338 \div 2 = \underline{169}$ | 12) $358 \div 2 = \underline{179}$ | 13) $930 \div 2 = \underline{465}$ |
| 14) $136 \div 2 = \underline{68}$ | 15) $596 \div 2 = \underline{298}$ | 16) $202 \div 2 = \underline{101}$ |
| 17) $196 \div 2 = \underline{98}$ | 18) $818 \div 2 = \underline{409}$ | 19) $668 \div 2 = \underline{334}$ |
| 20) $644 \div 2 = \underline{322}$ | 21) $770 \div 2 = \underline{385}$ | 22) $122 \div 2 = \underline{61}$ |
| 23) $502 \div 2 = \underline{251}$ | 24) $82 \div 2 = \underline{41}$ | 25) $902 \div 2 = \underline{451}$ |

Double these numbers

- | | | |
|--|--|--|
| 26) $148 \times 2 = \underline{296}$ | 31) $205 \times 2 = \underline{410}$ | 36) $840 \times 2 = \underline{1,680}$ |
| 27) $898 \times 2 = \underline{1,796}$ | 32) $997 \times 2 = \underline{1,994}$ | 37) $856 \times 2 = \underline{1,712}$ |
| 28) $663 \times 2 = \underline{1,326}$ | 33) $355 \times 2 = \underline{710}$ | 38) $312 \times 2 = \underline{624}$ |
| 29) $727 \times 2 = \underline{1,454}$ | 34) $401 \times 2 = \underline{802}$ | 39) $382 \times 2 = \underline{764}$ |
| 30) $576 \times 2 = \underline{1,152}$ | 35) $600 \times 2 = \underline{1,200}$ | 40) $541 \times 2 = \underline{1,082}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding "Nice" Numbers: 5 [B]



x 10,100,1000	Doubling Lg	Nice Numbers	- Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Adding sets of "nice" numbers:

Sometimes when adding a set of numbers, there may be 3 or more numbers which add easily together. These will usually be sets of numbers whose sum is 10 or 100.

Cross off the numbers as they are added so as not to get confused.

For example:

$$\cancel{8} + \cancel{4} + 2 + \overset{10}{\cancel{1}} + 3 = 10 + 5 = 15$$

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|---|--|
| 1) $1 + 8 + 1 + 4 + 2 = \underline{16}$ | 2) $30 + 20 + 20 + 30 + 40 = \underline{140}$ |
| 3) $5 + 3 + 5 + 3 + 4 = \underline{20}$ | 4) $70 + 70 + 30 + 40 + 30 = \underline{240}$ |
| 5) $6 + 7 + 1 + 2 + 1 = \underline{17}$ | 6) $30 + 40 + 60 + 40 + 30 = \underline{200}$ |
| 7) $2 + 1 + 2 + 6 + 9 = \underline{20}$ | 8) $20 + 60 + 20 + 40 + 30 = \underline{170}$ |
| 9) $4 + 2 + 6 + 3 + 8 = \underline{23}$ | 10) $10 + 40 + 10 + 40 + 50 = \underline{150}$ |

Multiply these numbers including decimals

- | | |
|--|--|
| 11) $15.1 \times 10 = \underline{151.0}$ | 16) $72.2 \times 1,000 = \underline{72,200.0}$ |
| 12) $18.9 \times 1,000 = \underline{18,900.0}$ | 17) $0.251 \times 10 = \underline{2.510}$ |
| 13) $86.1 \times 10 = \underline{861.0}$ | 18) $0.043 \times 10 = \underline{0.430}$ |
| 14) $5.61 \times 1,000 = \underline{5,610.00}$ | 19) $6.04 \times 1,000 = \underline{6,040.00}$ |
| 15) $6.36 \times 100 = \underline{636.00}$ | 20) $1.40 \times 1,000 = \underline{1,400.00}$ |

Divide these numbers

- | | |
|--|--|
| 21) $314.4 \div 10 = \underline{31.44}$ | 26) $95.06 \div 10 = \underline{9.506}$ |
| 22) $9,134 \div 1,000 = \underline{9.134}$ | 27) $9.67 \div 10 = \underline{0.967}$ |
| 23) $29.20 \div 10 = \underline{2.92}$ | 28) $38 \div 100 = \underline{0.38}$ |
| 24) $9,545 \div 1,000 = \underline{9.545}$ | 29) $249 \div 10 = \underline{24.9}$ |
| 25) $5,593 \div 10 = \underline{559.3}$ | 30) $2,305 \div 1,000 = \underline{2.305}$ |

Time:

Score:

Adding "Nice" Numbers: 5 [C]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Adding sets of "nice" numbers:

Sometimes when adding a set of numbers, several numbers may add to 20.

Cross off the numbers as they are added so as not to get confused.

For example:

$$\cancel{5} + \cancel{7}^{12} + 2 + \cancel{8}^{20} + 3 = 20 + 5 = 25$$

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|---|--|
| 1) $5 + 8 + 7 + 2 + 2 = \underline{24}$ | 6) $4 + 4 + 7 + 5 + 6 = \underline{26}$ |
| 2) $5 + 2 + 4 + 9 + 7 = \underline{27}$ | 7) $2 + 2 + 9 + 4 + 2 = \underline{19}$ |
| 3) $9 + 8 + 3 + 3 + 5 = \underline{28}$ | 8) $6 + 5 + 2 + 1 + 9 = \underline{23}$ |
| 4) $2 + 4 + 7 + 9 + 8 = \underline{30}$ | 9) $3 + 5 + 8 + 4 + 1 = \underline{21}$ |
| 5) $8 + 1 + 7 + 9 + 3 = \underline{28}$ | 10) $6 + 1 + 2 + 8 + 6 = \underline{23}$ |

Double these numbers

- | | | |
|--|--|--|
| 11) $336 \times 2 = \underline{672}$ | 16) $255 \times 2 = \underline{510}$ | 21) $769 \times 2 = \underline{1,538}$ |
| 12) $492 \times 2 = \underline{984}$ | 17) $113 \times 2 = \underline{226}$ | 22) $233 \times 2 = \underline{466}$ |
| 13) $448 \times 2 = \underline{896}$ | 18) $810 \times 2 = \underline{1,620}$ | 23) $812 \times 2 = \underline{1,624}$ |
| 14) $828 \times 2 = \underline{1,656}$ | 19) $973 \times 2 = \underline{1,946}$ | 24) $820 \times 2 = \underline{1,640}$ |
| 15) $989 \times 2 = \underline{1,978}$ | 20) $274 \times 2 = \underline{548}$ | 25) $792 \times 2 = \underline{1,584}$ |

Halve these numbers

- | | | | |
|------------------------------------|-----------------------------------|------------------------------------|------------------------------------|
| 26) $346 \div 2 = \underline{173}$ | 27) $130 \div 2 = \underline{65}$ | 36) $164 \div 2 = \underline{82}$ | 37) $378 \div 2 = \underline{189}$ |
| 28) $224 \div 2 = \underline{112}$ | 29) $66 \div 2 = \underline{33}$ | 38) $138 \div 2 = \underline{69}$ | 39) $238 \div 2 = \underline{119}$ |
| 30) $168 \div 2 = \underline{84}$ | 31) $160 \div 2 = \underline{80}$ | 40) $204 \div 2 = \underline{102}$ | 41) $278 \div 2 = \underline{139}$ |
| 32) $76 \div 2 = \underline{38}$ | 33) $48 \div 2 = \underline{24}$ | 42) $114 \div 2 = \underline{57}$ | 43) $30 \div 2 = \underline{15}$ |
| 34) $378 \div 2 = \underline{189}$ | 35) $194 \div 2 = \underline{97}$ | 44) $96 \div 2 = \underline{48}$ | 45) $254 \div 2 = \underline{127}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding Multiple "Nice" Numbers: 5 [D]

PROFESSOR PETE'S
CLASSROOMx 10,100,1000
÷ 10,100,1000Doubling Lg
Halving LgNice Numbers
+ Nr 100

- Nr 100

x5

x 50,25
Revision**Adding multiple "nice" numbers:**

If there are several of the same number, multiply them, then add the rest.

Cross off the numbers as they are multiplied or added so as not to get confused.

For example:

$$\cancel{7} + \cancel{7} + 2 + \cancel{7} + \cancel{7} + 4 = 28 + 6 = 34$$

4x7=28

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|---|--|
| 1) $3 + 3 + 3 + 3 + 7 + 2 = \underline{21}$ | 6) $7 + 7 + 1 + 6 + 7 + 7 = \underline{35}$ |
| 2) $1 + 5 + 5 + 2 + 5 + 8 = \underline{26}$ | 7) $4 + 9 + 4 + 4 + 4 + 4 = \underline{29}$ |
| 3) $4 + 4 + 1 + 4 + 4 + 8 = \underline{25}$ | 8) $1 + 4 + 7 + 7 + 7 + 6 = \underline{32}$ |
| 4) $2 + 6 + 6 + 6 + 6 + 4 = \underline{30}$ | 9) $9 + 9 + 9 + 9 + 8 + 1 = \underline{45}$ |
| 5) $2 + 2 + 3 + 2 + 2 + 2 = \underline{13}$ | 10) $6 + 4 + 4 + 1 + 4 + 4 = \underline{23}$ |

Multiply these numbers including decimals

- | | |
|--|--|
| 11) $5.97 \times 1,000 = \underline{5,970.00}$ | 16) $4.1 \times 100 = \underline{410.0}$ |
| 12) $65.4 \times 100 = \underline{6,540.0}$ | 17) $86.7 \times 1,000 = \underline{86,700.0}$ |
| 13) $8.41 \times 100 = \underline{841.00}$ | 18) $2.24 \times 1,000 = \underline{2,240.00}$ |
| 14) $28.0 \times 10 = \underline{280.0}$ | 19) $4.91 \times 1,000 = \underline{4,910.00}$ |
| 15) $70.4 \times 10 = \underline{704.0}$ | 20) $65.3 \times 10 = \underline{653.0}$ |

Halve these numbers

- | | | |
|------------------------------------|------------------------------------|------------------------------------|
| 21) $338 \div 2 = \underline{169}$ | 22) $358 \div 2 = \underline{179}$ | 23) $930 \div 2 = \underline{465}$ |
| 24) $136 \div 2 = \underline{68}$ | 25) $596 \div 2 = \underline{298}$ | 26) $202 \div 2 = \underline{101}$ |
| 27) $196 \div 2 = \underline{98}$ | 28) $818 \div 2 = \underline{409}$ | 29) $668 \div 2 = \underline{334}$ |
| 30) $644 \div 2 = \underline{322}$ | 31) $770 \div 2 = \underline{385}$ | 32) $122 \div 2 = \underline{61}$ |
| 33) $502 \div 2 = \underline{251}$ | 34) $82 \div 2 = \underline{41}$ | 35) $902 \div 2 = \underline{451}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding Near 100: 6 [A]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

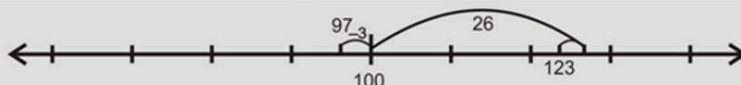
- Nr 100

x5

 x 50,25
 Revision
Adding near 100:

When adding near 100 numbers, a "compensation" method can often be used.

For example: $97 + 26 = (100 + 26) - 3 = (126 - 3) = 123$



As 97 is 3 less than 100, add 100 then take 3 off the answer.

Addition near 100

- | | | |
|--------------------|---------------------|---------------------|
| 1) $98 + 17 = 115$ | 6) $96 + 39 = 135$ | 11) $95 + 35 = 130$ |
| 2) $97 + 39 = 136$ | 7) $97 + 26 = 123$ | 12) $96 + 42 = 138$ |
| 3) $94 + 39 = 133$ | 8) $93 + 25 = 118$ | 13) $99 + 40 = 139$ |
| 4) $97 + 11 = 108$ | 9) $95 + 12 = 107$ | 14) $98 + 26 = 124$ |
| 5) $99 + 31 = 130$ | 10) $95 + 32 = 127$ | 15) $97 + 21 = 118$ |

Halve these numbers

- | | | |
|------------------------|------------------------|------------------------|
| 16) $176 \div 2 = 88$ | 17) $440 \div 2 = 220$ | 18) $100 \div 2 = 50$ |
| 19) $704 \div 2 = 352$ | 20) $790 \div 2 = 395$ | 21) $910 \div 2 = 455$ |
| 22) $494 \div 2 = 247$ | 23) $556 \div 2 = 278$ | 24) $624 \div 2 = 312$ |
| 25) $986 \div 2 = 493$ | 26) $452 \div 2 = 226$ | 27) $804 \div 2 = 402$ |
| 28) $870 \div 2 = 435$ | 29) $318 \div 2 = 159$ | 30) $22 \div 2 = 11$ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $108 \times 2 = 216$ | 36) $862 \times 2 = 1,724$ | 41) $956 \times 2 = 1,912$ |
| 32) $523 \times 2 = 1,046$ | 37) $174 \times 2 = 348$ | 42) $876 \times 2 = 1,752$ |
| 33) $570 \times 2 = 1,140$ | 38) $208 \times 2 = 416$ | 43) $638 \times 2 = 1,276$ |
| 34) $871 \times 2 = 1,742$ | 39) $129 \times 2 = 258$ | 44) $661 \times 2 = 1,322$ |
| 35) $161 \times 2 = 322$ | 40) $599 \times 2 = 1,198$ | 45) $186 \times 2 = 372$ |

Time:

Score:

Adding Near 100: 6 [B]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Adding near 100 or another hundred

197 rounds to 200. Use the same strategy but with a different hundred this time.

Addition near 100

- | | | |
|---------------------------------|----------------------------------|----------------------------------|
| 1) $18 + 291 = \underline{309}$ | 6) $19 + 394 = \underline{413}$ | 11) $194 + 48 = \underline{242}$ |
| 2) $22 + 494 = \underline{516}$ | 7) $31 + 292 = \underline{323}$ | 12) $25 + 395 = \underline{420}$ |
| 3) $291 + 24 = \underline{315}$ | 8) $42 + 497 = \underline{539}$ | 13) $13 + 595 = \underline{608}$ |
| 4) $43 + 194 = \underline{237}$ | 9) $25 + 296 = \underline{321}$ | 14) $16 + 398 = \underline{414}$ |
| 5) $32 + 192 = \underline{224}$ | 10) $598 + 34 = \underline{632}$ | 15) $26 + 297 = \underline{323}$ |

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|--|--|
| 16) $6 + 8 + 2 + 3 + 8 = \underline{27}$ | 17) $2 + 6 + 5 + 5 + 2 = \underline{20}$ |
| 18) $8 + 5 + 6 + 7 + 1 = \underline{27}$ | 19) $2 + 7 + 9 + 9 + 3 = \underline{30}$ |
| 20) $1 + 9 + 8 + 6 + 5 = \underline{29}$ | 21) $3 + 7 + 5 + 4 + 9 = \underline{28}$ |
| 22) $3 + 8 + 8 + 6 + 8 = \underline{33}$ | 23) $4 + 8 + 2 + 6 + 8 = \underline{28}$ |
| 24) $7 + 7 + 6 + 4 + 7 = \underline{31}$ | 25) $8 + 2 + 6 + 5 + 2 = \underline{23}$ |

Halve these numbers

- | | | |
|------------------------------------|------------------------------------|------------------------------------|
| 26) $252 \div 2 = \underline{126}$ | 27) $730 \div 2 = \underline{365}$ | 28) $800 \div 2 = \underline{400}$ |
| 29) $796 \div 2 = \underline{398}$ | 30) $974 \div 2 = \underline{487}$ | 31) $746 \div 2 = \underline{373}$ |
| 32) $984 \div 2 = \underline{492}$ | 33) $784 \div 2 = \underline{392}$ | 34) $722 \div 2 = \underline{361}$ |
| 35) $688 \div 2 = \underline{344}$ | 36) $902 \div 2 = \underline{451}$ | 37) $636 \div 2 = \underline{318}$ |
| 38) $766 \div 2 = \underline{383}$ | 39) $778 \div 2 = \underline{389}$ | 40) $574 \div 2 = \underline{287}$ |

Double these numbers

- | | | |
|--|--|--|
| 41) $947 \times 2 = \underline{1,894}$ | 43) $859 \times 2 = \underline{1,718}$ | 45) $738 \times 2 = \underline{1,476}$ |
| 42) $170 \times 2 = \underline{340}$ | 44) $664 \times 2 = \underline{1,328}$ | 46) $332 \times 2 = \underline{664}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding Near 100: 6 [C]

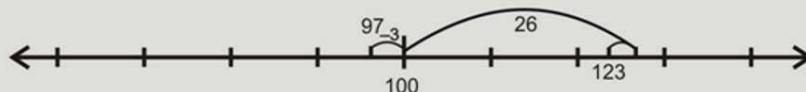
x 10,100,1000
÷ 10,100,1000Doubling Lg
Halving LgNice Numbers
+ Nr 100

- Nr 100

x5

x 50,25
Revision**Adding just over 100:**

When adding numbers just over 100, add the "extra" first, then the hundred.

For example: $106 + 27 = (6 + 27) + 100 = 33 + 100 = 133$ **Addition near 100**

- | | | |
|---------------------------------|----------------------------------|----------------------------------|
| 1) $101 + 34 = \underline{135}$ | 6) $106 + 22 = \underline{128}$ | 11) $205 + 17 = \underline{222}$ |
| 2) $108 + 25 = \underline{133}$ | 7) $102 + 40 = \underline{142}$ | 12) $404 + 37 = \underline{441}$ |
| 3) $103 + 22 = \underline{125}$ | 8) $107 + 25 = \underline{132}$ | 13) $303 + 23 = \underline{326}$ |
| 4) $107 + 23 = \underline{130}$ | 9) $108 + 40 = \underline{148}$ | 14) $203 + 38 = \underline{241}$ |
| 5) $104 + 14 = \underline{118}$ | 10) $104 + 41 = \underline{145}$ | 15) $301 + 33 = \underline{334}$ |

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|--|--|
| 16) $2 + 3 + 8 + 5 + 4 = \underline{22}$ | 17) $4 + 6 + 8 + 7 + 3 = \underline{28}$ |
| 18) $8 + 7 + 6 + 3 + 4 = \underline{28}$ | 19) $2 + 2 + 4 + 4 + 3 = \underline{15}$ |
| 20) $9 + 5 + 6 + 1 + 7 = \underline{28}$ | 21) $8 + 7 + 6 + 2 + 2 = \underline{25}$ |
| 22) $2 + 5 + 5 + 1 + 7 = \underline{20}$ | 23) $6 + 6 + 7 + 6 + 8 = \underline{33}$ |
| 24) $3 + 2 + 8 + 3 + 2 = \underline{18}$ | 25) $5 + 2 + 8 + 5 + 8 = \underline{28}$ |

Addition revision

- | | |
|-------------------------------|------------------------------|
| 26) $4 + 5 = \underline{9}$ | 29) $9 + 8 = \underline{17}$ |
| 27) $4 + 6 = \underline{10}$ | 30) $7 + 8 = \underline{15}$ |
| 28) $10 + 9 = \underline{19}$ | 31) $4 + 7 = \underline{11}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 38) $13 - 4 = \underline{9}$ | 41) $18 - 9 = \underline{9}$ |
| 39) $12 - 4 = \underline{8}$ | 42) $13 - 7 = \underline{6}$ |
| 40) $17 - 9 = \underline{8}$ | 43) $13 - 5 = \underline{8}$ |

Multiplication

- | | |
|------------------------------------|-----------------------------------|
| 32) $7 \times 8 = \underline{56}$ | 35) $6 \times 5 = \underline{30}$ |
| 33) $10 \times 5 = \underline{50}$ | 36) $7 \times 5 = \underline{35}$ |
| 34) $3 \times 6 = \underline{18}$ | 37) $5 \times 5 = \underline{25}$ |

Division

- | | |
|---------------------------------|---------------------------------|
| 44) $24 \div 8 = \underline{3}$ | 47) $18 \div 9 = \underline{2}$ |
| 45) $54 \div 9 = \underline{6}$ | 48) $40 \div 5 = \underline{8}$ |
| 46) $56 \div 8 = \underline{7}$ | 49) $35 \div 7 = \underline{5}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Adding Near 100: 6 [D]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Addition near 100

- | | | |
|---------------------|----------------------|----------------------|
| 1) $96 + 36 = 132$ | 6) $307 + 37 = 344$ | 11) $98 + 43 = 141$ |
| 2) $98 + 14 = 112$ | 7) $108 + 19 = 127$ | 12) $207 + 10 = 217$ |
| 3) $204 + 29 = 233$ | 8) $294 + 28 = 322$ | 13) $108 + 44 = 152$ |
| 4) $199 + 30 = 229$ | 9) $91 + 24 = 115$ | 14) $101 + 15 = 116$ |
| 5) $91 + 16 = 107$ | 10) $104 + 19 = 123$ | 15) $190 + 12 = 202$ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 16) $148 \times 2 = 296$ | 21) $205 \times 2 = 410$ | 26) $840 \times 2 = 1,680$ |
| 17) $898 \times 2 = 1,796$ | 22) $997 \times 2 = 1,994$ | 27) $856 \times 2 = 1,712$ |
| 18) $663 \times 2 = 1,326$ | 23) $355 \times 2 = 710$ | 28) $312 \times 2 = 624$ |
| 19) $727 \times 2 = 1,454$ | 24) $401 \times 2 = 802$ | 29) $382 \times 2 = 764$ |
| 20) $576 \times 2 = 1,152$ | 25) $600 \times 2 = 1,200$ | 30) $541 \times 2 = 1,082$ |

Halve these numbers

- | | | |
|------------------------|------------------------|------------------------|
| 31) $338 \div 2 = 169$ | 32) $358 \div 2 = 179$ | 33) $930 \div 2 = 465$ |
| 34) $136 \div 2 = 68$ | 35) $596 \div 2 = 298$ | 36) $202 \div 2 = 101$ |
| 37) $196 \div 2 = 98$ | 38) $818 \div 2 = 409$ | 39) $668 \div 2 = 334$ |
| 40) $644 \div 2 = 322$ | 41) $770 \div 2 = 385$ | 42) $122 \div 2 = 61$ |
| 43) $502 \div 2 = 251$ | 44) $82 \div 2 = 41$ | 45) $902 \div 2 = 451$ |

Addition revision

- | | |
|-------------------|------------------|
| 46) $4 + 5 = 9$ | 49) $9 + 8 = 17$ |
| 47) $4 + 6 = 10$ | 50) $7 + 8 = 15$ |
| 48) $10 + 9 = 19$ | 51) $4 + 7 = 11$ |

Subtraction revision

- | | |
|------------------|------------------|
| 56) $13 - 4 = 9$ | 59) $18 - 9 = 9$ |
| 57) $12 - 4 = 8$ | 60) $13 - 7 = 6$ |
| 58) $17 - 9 = 8$ | 61) $13 - 5 = 8$ |

Multiplication

- | | |
|------------------------|------------------------|
| 52) $10 \times 9 = 90$ | 54) $10 \times 6 = 60$ |
| 53) $9 \times 6 = 54$ | 55) $8 \times 8 = 64$ |

Division

- | | |
|---------------------|---------------------|
| 62) $30 \div 6 = 5$ | 64) $48 \div 8 = 6$ |
| 63) $72 \div 9 = 8$ | 65) $64 \div 8 = 8$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Subtracting Near 100: 7 [A]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

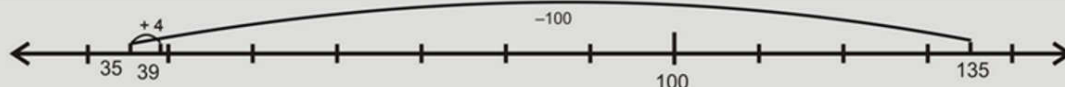
 Nice Numbers
 + Nr 100

 - Nr 100
 x5

 x 50,25
 Revision
Subtracting near 100:

When subtracting a number just less than 100, we can first take away 100, then compensate by adding the difference.

For example: $135 - 96 = (135 - 100) + 4 = 35 + 4 = 39$

**Subtraction near 100**

- | | | |
|--------------------|---------------------|---------------------|
| 1) $125 - 91 = 34$ | 6) $135 - 96 = 39$ | 11) $127 - 96 = 31$ |
| 2) $120 - 98 = 22$ | 7) $135 - 97 = 38$ | 12) $132 - 96 = 36$ |
| 3) $137 - 97 = 40$ | 8) $118 - 98 = 20$ | 13) $138 - 94 = 44$ |
| 4) $115 - 97 = 18$ | 9) $127 - 95 = 32$ | 14) $109 - 95 = 14$ |
| 5) $138 - 99 = 39$ | 10) $143 - 92 = 51$ | 15) $116 - 92 = 24$ |

Addition near 100

- | | | |
|----------------------|----------------------|----------------------|
| 16) $198 + 24 = 222$ | 21) $196 + 41 = 237$ | 26) $103 + 36 = 139$ |
| 17) $591 + 13 = 604$ | 22) $94 + 12 = 106$ | 27) $299 + 41 = 340$ |
| 18) $91 + 20 = 111$ | 23) $100 + 24 = 124$ | 28) $404 + 14 = 418$ |
| 19) $107 + 10 = 117$ | 24) $306 + 26 = 332$ | 29) $96 + 25 = 121$ |
| 20) $206 + 36 = 242$ | 25) $105 + 34 = 139$ | 30) $95 + 23 = 118$ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $340 \times 2 = 680$ | 34) $751 \times 2 = 1,502$ | 37) $306 \times 2 = 612$ |
| 32) $686 \times 2 = 1,372$ | 35) $344 \times 2 = 688$ | 38) $523 \times 2 = 1,046$ |
| 33) $608 \times 2 = 1,216$ | 36) $165 \times 2 = 330$ | 39) $939 \times 2 = 1,878$ |

Multiplication

- | | |
|------------------------|------------------------|
| 40) $5 \times 5 = 25$ | 44) $10 \times 6 = 60$ |
| 41) $9 \times 8 = 72$ | 45) $10 \times 7 = 70$ |
| 42) $10 \times 5 = 50$ | 46) $9 \times 5 = 45$ |
| 43) $9 \times 9 = 81$ | 47) $6 \times 7 = 42$ |

Division

- | | |
|----------------------|----------------------|
| 48) $64 \div 8 = 8$ | 52) $35 \div 5 = 7$ |
| 49) $50 \div 5 = 10$ | 53) $60 \div 6 = 10$ |
| 50) $40 \div 8 = 5$ | 54) $49 \div 7 = 7$ |
| 51) $80 \div 8 = 10$ | 55) $25 \div 5 = 5$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Subtracting Near 100: 7 [B]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

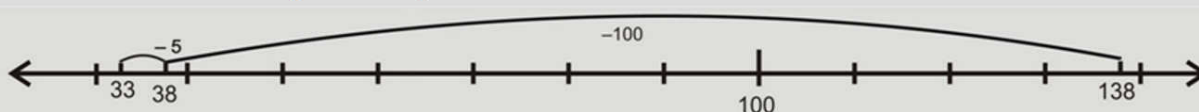
 Nice Numbers
 + Nr 100

 - Nr 100
 x5

 x 50,25
 Revision
Subtracting near 100:

When subtracting numbers just over 100, subtract the hundred first, then the "extra".

For example: $138 - 105 = (138 - 100) - 5 = 138 - 5 = 133$

**Subtraction near 100**

- | | | |
|---------------------------------|-----------------------------------|-----------------------------------|
| 1) $140 - 107 = \underline{33}$ | 6) $110 - 105 = \underline{5}$ | 11) $212 - 108 = \underline{104}$ |
| 2) $120 - 104 = \underline{16}$ | 7) $131 - 104 = \underline{27}$ | 12) $111 - 103 = \underline{8}$ |
| 3) $133 - 107 = \underline{26}$ | 8) $212 - 106 = \underline{106}$ | 13) $439 - 108 = \underline{331}$ |
| 4) $127 - 107 = \underline{20}$ | 9) $116 - 104 = \underline{12}$ | 14) $140 - 108 = \underline{32}$ |
| 5) $143 - 106 = \underline{37}$ | 10) $321 - 102 = \underline{219}$ | 15) $114 - 103 = \underline{11}$ |

Addition near 100

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| 16) $198 + 24 = \underline{222}$ | 21) $196 + 41 = \underline{237}$ | 26) $103 + 36 = \underline{139}$ |
| 17) $591 + 13 = \underline{604}$ | 22) $94 + 12 = \underline{106}$ | 27) $299 + 41 = \underline{340}$ |
| 18) $91 + 20 = \underline{111}$ | 23) $100 + 24 = \underline{124}$ | 28) $404 + 14 = \underline{418}$ |
| 19) $107 + 10 = \underline{117}$ | 24) $306 + 26 = \underline{332}$ | 29) $96 + 25 = \underline{121}$ |
| 20) $206 + 36 = \underline{242}$ | 25) $105 + 34 = \underline{139}$ | 30) $95 + 23 = \underline{118}$ |

Double these numbers

- | | | |
|--|--|--|
| 31) $340 \times 2 = \underline{680}$ | 34) $751 \times 2 = \underline{1,502}$ | 37) $306 \times 2 = \underline{612}$ |
| 32) $686 \times 2 = \underline{1,372}$ | 35) $344 \times 2 = \underline{688}$ | 38) $523 \times 2 = \underline{1,046}$ |
| 33) $608 \times 2 = \underline{1,216}$ | 36) $165 \times 2 = \underline{330}$ | 39) $939 \times 2 = \underline{1,878}$ |

Multiplication

- | | |
|------------------------------------|------------------------------------|
| 40) $5 \times 5 = \underline{25}$ | 44) $10 \times 6 = \underline{60}$ |
| 41) $9 \times 8 = \underline{72}$ | 45) $10 \times 7 = \underline{70}$ |
| 42) $10 \times 5 = \underline{50}$ | 46) $9 \times 5 = \underline{45}$ |
| 43) $9 \times 9 = \underline{81}$ | 47) $6 \times 7 = \underline{42}$ |

Division

- | | |
|----------------------------------|----------------------------------|
| 48) $64 \div 8 = \underline{8}$ | 52) $35 \div 5 = \underline{7}$ |
| 49) $50 \div 5 = \underline{10}$ | 53) $60 \div 6 = \underline{10}$ |
| 50) $40 \div 8 = \underline{5}$ | 54) $49 \div 7 = \underline{7}$ |
| 51) $80 \div 8 = \underline{10}$ | 55) $25 \div 5 = \underline{5}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Subtracting Near 100: 7 [C]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100 x5	x 50,25 Revision
-------------------------------	---------------------------	--------------------------	----------------	---------------------

Subtraction near 100

- | | | |
|----------------------------------|---------------------------------|-----------------------------------|
| 1) $126 - 96 = \underline{30}$ | 6) $139 - 93 = \underline{46}$ | 11) $124 - 97 = \underline{27}$ |
| 2) $112 - 93 = \underline{19}$ | 7) $113 - 91 = \underline{22}$ | 12) $340 - 105 = \underline{235}$ |
| 3) $125 - 97 = \underline{28}$ | 8) $528 - 90 = \underline{438}$ | 13) $135 - 95 = \underline{40}$ |
| 4) $124 - 101 = \underline{23}$ | 9) $219 - 98 = \underline{121}$ | 14) $131 - 103 = \underline{28}$ |
| 5) $933 - 103 = \underline{830}$ | 10) $142 - 98 = \underline{44}$ | 15) $128 - 93 = \underline{35}$ |

Addition near 100

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| 16) $198 + 24 = \underline{222}$ | 21) $196 + 41 = \underline{237}$ | 26) $103 + 36 = \underline{139}$ |
| 17) $591 + 13 = \underline{604}$ | 22) $94 + 12 = \underline{106}$ | 27) $299 + 41 = \underline{340}$ |
| 18) $91 + 20 = \underline{111}$ | 23) $100 + 24 = \underline{124}$ | 28) $404 + 14 = \underline{418}$ |
| 19) $107 + 10 = \underline{117}$ | 24) $306 + 26 = \underline{332}$ | 29) $96 + 25 = \underline{121}$ |
| 20) $206 + 36 = \underline{242}$ | 25) $105 + 34 = \underline{139}$ | 30) $95 + 23 = \underline{118}$ |

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|--|--|
| 31) $6 + 1 + 9 + 8 + 2 + 5 = \underline{31}$ | 36) $6 + 3 + 7 + 8 + 2 + 6 = \underline{32}$ |
| 32) $4 + 8 + 6 + 3 + 2 + 7 = \underline{30}$ | 37) $2 + 7 + 7 + 8 + 7 + 7 = \underline{38}$ |
| 33) $5 + 2 + 5 + 1 + 7 + 2 = \underline{22}$ | 38) $3 + 3 + 1 + 1 + 7 + 2 = \underline{17}$ |
| 34) $9 + 7 + 7 + 5 + 7 + 9 = \underline{44}$ | 39) $2 + 4 + 2 + 4 + 3 + 3 = \underline{18}$ |
| 35) $2 + 6 + 4 + 5 + 5 + 1 = \underline{23}$ | 40) $3 + 7 + 3 + 4 + 4 + 2 = \underline{23}$ |

Double these numbers

- | | | |
|--------------------------------------|--|--|
| 41) $173 \times 2 = \underline{346}$ | 45) $959 \times 2 = \underline{1,918}$ | 49) $193 \times 2 = \underline{386}$ |
| 42) $385 \times 2 = \underline{770}$ | 46) $821 \times 2 = \underline{1,642}$ | 50) $836 \times 2 = \underline{1,672}$ |
| 43) $376 \times 2 = \underline{752}$ | 47) $907 \times 2 = \underline{1,814}$ | 51) $820 \times 2 = \underline{1,640}$ |
| 44) $183 \times 2 = \underline{366}$ | 48) $360 \times 2 = \underline{720}$ | 52) $226 \times 2 = \underline{452}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Subtracting Near 100: 7 [D]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100 x5	x 50,25 Revision
-------------------------------	---------------------------	--------------------------	----------------	---------------------

Subtraction near 100

- | | | |
|---------------------------------|----------------------------------|----------------------------------|
| 1) $132 - 93 = \underline{39}$ | 6) $510 - 93 = \underline{417}$ | 11) $138 - 95 = \underline{43}$ |
| 2) $144 - 97 = \underline{47}$ | 7) $142 - 94 = \underline{48}$ | 12) $332 - 98 = \underline{234}$ |
| 3) $144 - 94 = \underline{50}$ | 8) $235 - 96 = \underline{139}$ | 13) $141 - 98 = \underline{43}$ |
| 4) $136 - 96 = \underline{40}$ | 9) $118 - 98 = \underline{20}$ | 14) $126 - 105 = \underline{21}$ |
| 5) $141 - 103 = \underline{38}$ | 10) $820 - 98 = \underline{722}$ | 15) $140 - 95 = \underline{45}$ |

Addition near 100

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| 16) $193 + 43 = \underline{236}$ | 21) $206 + 26 = \underline{232}$ | 26) $99 + 37 = \underline{136}$ |
| 17) $91 + 37 = \underline{128}$ | 22) $301 + 37 = \underline{338}$ | 27) $191 + 23 = \underline{214}$ |
| 18) $593 + 14 = \underline{607}$ | 23) $99 + 45 = \underline{144}$ | 28) $408 + 28 = \underline{436}$ |
| 19) $103 + 22 = \underline{125}$ | 24) $91 + 41 = \underline{132}$ | 29) $102 + 26 = \underline{128}$ |
| 20) $91 + 30 = \underline{121}$ | 25) $94 + 31 = \underline{125}$ | 30) $97 + 38 = \underline{135}$ |

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|--|--|
| 31) $8 + 9 + 2 + 1 + 6 + 6 = \underline{32}$ | 36) $4 + 6 + 7 + 6 + 7 + 2 = \underline{32}$ |
| 32) $7 + 2 + 3 + 2 + 5 + 1 = \underline{20}$ | 37) $2 + 9 + 2 + 1 + 2 + 2 = \underline{18}$ |
| 33) $5 + 5 + 2 + 3 + 3 + 5 = \underline{23}$ | 38) $1 + 1 + 4 + 8 + 8 + 3 = \underline{25}$ |
| 34) $8 + 2 + 2 + 8 + 6 + 5 = \underline{31}$ | 39) $2 + 4 + 3 + 6 + 8 + 4 = \underline{27}$ |
| 35) $7 + 7 + 8 + 3 + 3 + 3 = \underline{31}$ | 40) $8 + 8 + 8 + 8 + 5 + 2 = \underline{39}$ |

Double these numbers

- | | | |
|--------------------------------------|--|--|
| 41) $173 \times 2 = \underline{346}$ | 45) $959 \times 2 = \underline{1,918}$ | 49) $193 \times 2 = \underline{386}$ |
| 42) $385 \times 2 = \underline{770}$ | 46) $821 \times 2 = \underline{1,642}$ | 50) $836 \times 2 = \underline{1,672}$ |
| 43) $376 \times 2 = \underline{752}$ | 47) $907 \times 2 = \underline{1,814}$ | 51) $820 \times 2 = \underline{1,640}$ |
| 44) $183 \times 2 = \underline{366}$ | 48) $360 \times 2 = \underline{720}$ | 52) $226 \times 2 = \underline{452}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying 2- & 3-digit numbers by 5: 8 [A]

x 10,100,1000
÷10,100,1000Doubling Lg
Halving LgNice Numbers
+ Nr 100

- Nr 100

x 50,25

x5

Revision

Multiplying 2-digit numbers by 5

We can use the same strategy we used for the x5 number facts: multiply the number by 10 first, then halve it.
For example, 37×5 : $37 \times 10 = 370$. Half of 370 = 185 $38 \times 5 = 190$

2-digit numbers x 5

- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1) $28 \times 10 = \underline{280}$ | 6) $60 \times 5 = \underline{300}$ | 11) $68 \times 5 = \underline{340}$ | 16) $38 \times 5 = \underline{190}$ |
| 2) $28 \times 5 = \underline{140}$ | 7) $53 \times 5 = \underline{265}$ | 12) $96 \times 5 = \underline{480}$ | 17) $47 \times 5 = \underline{235}$ |
| 3) $63 \times 10 = \underline{630}$ | 8) $32 \times 5 = \underline{160}$ | 13) $77 \times 5 = \underline{385}$ | 18) $95 \times 5 = \underline{475}$ |
| 4) $63 \times 5 = \underline{315}$ | 9) $76 \times 5 = \underline{380}$ | 14) $89 \times 5 = \underline{445}$ | 19) $69 \times 5 = \underline{345}$ |
| 5) $90 \times 5 = \underline{450}$ | 10) $98 \times 5 = \underline{490}$ | 15) $24 \times 5 = \underline{120}$ | 20) $65 \times 5 = \underline{325}$ |

3 digit numbers x 5

- | | | |
|---|--|--|
| 21) $424 \times 10 = \underline{4,240}$ | 25) $521 \times 5 = \underline{2,605}$ | 29) $940 \times 5 = \underline{4,700}$ |
| 22) $424 \times 5 = \underline{2,120}$ | 26) $412 \times 5 = \underline{2,060}$ | 30) $130 \times 5 = \underline{650}$ |
| 23) $263 \times 10 = \underline{2,630}$ | 27) $811 \times 5 = \underline{4,055}$ | 31) $886 \times 5 = \underline{4,430}$ |
| 24) $263 \times 5 = \underline{1,315}$ | 28) $644 \times 5 = \underline{3,220}$ | 32) $844 \times 5 = \underline{4,220}$ |

Subtraction near 100

- | | | |
|----------------------------------|----------------------------------|-----------------------------------|
| 33) $126 - 108 = \underline{18}$ | 38) $144 - 107 = \underline{37}$ | 43) $126 - 106 = \underline{20}$ |
| 34) $122 - 105 = \underline{17}$ | 39) $211 - 98 = \underline{113}$ | 44) $113 - 96 = \underline{17}$ |
| 35) $138 - 104 = \underline{34}$ | 40) $129 - 99 = \underline{30}$ | 45) $514 - 100 = \underline{414}$ |
| 36) $112 - 93 = \underline{19}$ | 41) $344 - 92 = \underline{252}$ | 46) $140 - 100 = \underline{40}$ |
| 37) $134 - 106 = \underline{28}$ | 42) $137 - 94 = \underline{43}$ | 47) $127 - 98 = \underline{29}$ |

Multiplication

- | | |
|------------------------------------|------------------------------------|
| 48) $5 \times 5 = \underline{25}$ | 52) $10 \times 6 = \underline{60}$ |
| 49) $9 \times 8 = \underline{72}$ | 53) $10 \times 7 = \underline{70}$ |
| 50) $10 \times 5 = \underline{50}$ | 54) $9 \times 5 = \underline{45}$ |
| 51) $9 \times 9 = \underline{81}$ | 55) $6 \times 7 = \underline{42}$ |

Division

- | | |
|----------------------------------|----------------------------------|
| 56) $64 \div 8 = \underline{8}$ | 60) $35 \div 5 = \underline{7}$ |
| 57) $50 \div 5 = \underline{10}$ | 61) $60 \div 6 = \underline{10}$ |
| 58) $40 \div 8 = \underline{5}$ | 62) $49 \div 7 = \underline{7}$ |
| 59) $80 \div 8 = \underline{10}$ | 63) $25 \div 5 = \underline{5}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying 2- & 3-digit numbers by 5: 8 [B]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x 50,25 x5	Revision
-------------------------------	---------------------------	--------------------------	----------	---------------	----------

2-digit numbers x 5

- | | | | |
|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1) $82 \times 5 = \underline{410}$ | 6) $23 \times 5 = \underline{115}$ | 11) $37 \times 5 = \underline{185}$ | 16) $63 \times 5 = \underline{315}$ |
| 2) $42 \times 5 = \underline{210}$ | 7) $57 \times 5 = \underline{285}$ | 12) $96 \times 5 = \underline{480}$ | 17) $75 \times 5 = \underline{375}$ |
| 3) $34 \times 5 = \underline{170}$ | 8) $78 \times 5 = \underline{390}$ | 13) $33 \times 5 = \underline{165}$ | 18) $44 \times 5 = \underline{220}$ |
| 4) $84 \times 5 = \underline{420}$ | 9) $90 \times 5 = \underline{450}$ | 14) $92 \times 5 = \underline{460}$ | 19) $73 \times 5 = \underline{365}$ |
| 5) $83 \times 5 = \underline{415}$ | 10) $53 \times 5 = \underline{265}$ | 15) $65 \times 5 = \underline{325}$ | 20) $97 \times 5 = \underline{485}$ |

Addition near 100

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| 21) $198 + 24 = \underline{222}$ | 26) $196 + 41 = \underline{237}$ | 31) $103 + 36 = \underline{139}$ |
| 22) $591 + 13 = \underline{604}$ | 27) $94 + 12 = \underline{106}$ | 32) $299 + 41 = \underline{340}$ |
| 23) $91 + 20 = \underline{111}$ | 28) $100 + 24 = \underline{124}$ | 33) $404 + 14 = \underline{418}$ |
| 24) $107 + 10 = \underline{117}$ | 29) $306 + 26 = \underline{332}$ | 34) $96 + 25 = \underline{121}$ |
| 25) $206 + 36 = \underline{242}$ | 30) $105 + 34 = \underline{139}$ | 35) $95 + 23 = \underline{118}$ |

Divide these numbers

- | | |
|--|--|
| 36) $121 \div 10 = \underline{12.1}$ | 41) $6,006 \div 100 = \underline{60.06}$ |
| 37) $508 \div 1,000 = \underline{0.508}$ | 42) $436 \div 1,000 = \underline{0.436}$ |
| 38) $728 \div 10 = \underline{72.8}$ | 43) $51.6 \div 100 = \underline{0.516}$ |
| 39) $91.6 \div 100 = \underline{0.916}$ | 44) $961 \div 10 = \underline{96.1}$ |
| 40) $172 \div 10 = \underline{17.2}$ | 45) $823 \div 1,000 = \underline{0.823}$ |

Multiplication

- | | |
|------------------------------------|------------------------------------|
| 46) $5 \times 6 = \underline{30}$ | 50) $9 \times 7 = \underline{63}$ |
| 47) $5 \times 5 = \underline{25}$ | 51) $10 \times 7 = \underline{70}$ |
| 48) $8 \times 8 = \underline{64}$ | 52) $8 \times 7 = \underline{56}$ |
| 49) $10 \times 5 = \underline{50}$ | 53) $6 \times 6 = \underline{36}$ |

Division

- | | |
|---------------------------------|----------------------------------|
| 54) $45 \div 5 = \underline{9}$ | 58) $35 \div 7 = \underline{5}$ |
| 55) $48 \div 6 = \underline{8}$ | 59) $90 \div 9 = \underline{10}$ |
| 56) $40 \div 5 = \underline{8}$ | 60) $54 \div 9 = \underline{6}$ |
| 57) $64 \div 8 = \underline{8}$ | 61) $63 \div 7 = \underline{9}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying 2- & 3-digit numbers by 5: 8 [C]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x 50,25 x5	Revision
-------------------------------	---------------------------	--------------------------	----------	---------------	----------

2-digit numbers x 5

- 1) $35 \times 5 = 175$ 6) $94 \times 5 = 470$ 11) $92 \times 5 = 460$ 16) $95 \times 5 = 475$
 2) $51 \times 5 = 255$ 7) $90 \times 5 = 450$ 12) $93 \times 5 = 465$ 17) $48 \times 5 = 240$
 3) $25 \times 5 = 125$ 8) $26 \times 5 = 130$ 13) $74 \times 5 = 370$ 18) $63 \times 5 = 315$
 4) $39 \times 5 = 195$ 9) $29 \times 5 = 145$ 14) $76 \times 5 = 380$ 19) $40 \times 5 = 200$
 5) $60 \times 5 = 300$ 10) $82 \times 5 = 410$ 15) $69 \times 5 = 345$ 20) $53 \times 5 = 265$

Multiply these numbers including decimals

- 21) $1.99 \times 100 = 199.00$ 26) $198 \times 1,000 = 198,000$
 22) $200 \times 10 = 2,000$ 27) $58.2 \times 10 = 582.0$
 23) $7.27 \times 1,000 = 7,270.00$ 28) $2.21 \times 10 = 22.10$
 24) $626 \times 100 = 62,600$ 29) $0.452 \times 10 = 4.520$
 25) $60.1 \times 100 = 6,010.0$ 30) $6.42 \times 100 = 642.00$

Addition revision

- 31) $6 + 5 = 11$ 36) $9 + 4 = 13$
 32) $9 + 8 = 17$ 37) $5 + 5 = 10$
 33) $4 + 6 = 10$ 38) $4 + 5 = 9$
 34) $5 + 8 = 13$ 39) $3 + 5 = 8$
 35) $7 + 4 = 11$ 40) $10 + 7 = 17$

Subtraction revision

- 41) $10 - 5 = 5$ 46) $12 - 4 = 8$
 42) $9 - 4 = 5$ 47) $17 - 8 = 9$
 43) $17 - 9 = 8$ 48) $11 - 3 = 8$
 44) $14 - 6 = 8$ 49) $16 - 8 = 8$
 45) $9 - 2 = 7$ 50) $18 - 9 = 9$

Multiplication

- 51) $8 \times 7 = 56$ 56) $8 \times 9 = 72$
 52) $9 \times 5 = 45$ 57) $6 \times 5 = 30$
 53) $8 \times 6 = 48$ 58) $8 \times 5 = 40$
 54) $5 \times 9 = 45$ 59) $10 \times 6 = 60$
 55) $7 \times 8 = 56$ 60) $7 \times 5 = 35$

Division

- 61) $48 \div 8 = 6$ 66) $54 \div 6 = 9$
 62) $56 \div 8 = 7$ 67) $72 \div 8 = 9$
 63) $36 \div 6 = 6$ 68) $30 \div 6 = 5$
 64) $70 \div 7 = 10$ 69) $35 \div 5 = 7$
 65) $40 \div 5 = 8$ 70) $25 \div 5 = 5$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying 2- & 3-digit numbers by 5: 8 [D]

x 10,100,1000
÷ 10,100,1000Doubling Lg
Halving LgNice Numbers
+ Nr 100

- Nr 100

x 50,25

x5

Revision

2 digit numbers x 5

- 1) $66 \times 5 = 330$ 6) $77 \times 5 = 385$ 11) $95 \times 5 = 475$ 16) $71 \times 5 = 355$
 2) $65 \times 5 = 325$ 7) $81 \times 5 = 405$ 12) $93 \times 5 = 465$ 17) $61 \times 5 = 305$
 3) $64 \times 5 = 320$ 8) $46 \times 5 = 230$ 13) $62 \times 5 = 310$ 18) $89 \times 5 = 445$
 4) $38 \times 5 = 190$ 9) $68 \times 5 = 340$ 14) $54 \times 5 = 270$ 19) $32 \times 5 = 160$
 5) $23 \times 5 = 115$ 10) $67 \times 5 = 335$ 15) $75 \times 5 = 375$ 20) $28 \times 5 = 140$

Multiply these numbers including decimals

- 21) $8.01 \times 1,000 = 8,010.00$ 26) $87 \times 1,000 = 87,000$
 22) $7.74 \times 1,000 = 7,740.00$ 27) $66.8 \times 1,000 = 66,800.0$
 23) $51.9 \times 100 = 5,190.0$ 28) $4.75 \times 100 = 475.00$
 24) $9.18 \times 100 = 918.00$ 29) $84.6 \times 100 = 8,460.0$
 25) $10.9 \times 10 = 109.0$ 30) $1.83 \times 10 = 18.30$

Addition revision

- 31) $4 + 8 = 12$ 36) $10 + 9 = 19$
 32) $3 + 7 = 10$ 37) $4 + 7 = 11$
 33) $6 + 7 = 13$ 38) $10 + 4 = 14$
 34) $5 + 5 = 10$ 39) $5 + 4 = 9$
 35) $3 + 4 = 7$ 40) $5 + 9 = 14$

Subtraction revision

- 41) $16 - 8 = 8$ 46) $16 - 7 = 9$
 42) $11 - 4 = 7$ 47) $12 - 7 = 5$
 43) $11 - 5 = 6$ 48) $13 - 8 = 5$
 44) $18 - 9 = 9$ 49) $16 - 9 = 7$
 45) $14 - 9 = 5$ 50) $17 - 8 = 9$

Multiplication

- 51) $9 \times 6 = 54$ 56) $6 \times 7 = 42$
 52) $9 \times 8 = 72$ 57) $5 \times 8 = 40$
 53) $7 \times 9 = 63$ 58) $8 \times 6 = 48$
 54) $6 \times 6 = 36$ 59) $6 \times 8 = 48$
 55) $7 \times 8 = 56$ 60) $8 \times 5 = 40$

Division

- 61) $56 \div 7 = 8$ 66) $35 \div 7 = 5$
 62) $45 \div 9 = 5$ 67) $72 \div 9 = 8$
 63) $60 \div 6 = 10$ 68) $64 \div 8 = 8$
 64) $36 \div 6 = 6$ 69) $81 \div 9 = 9$
 65) $48 \div 6 = 8$ 70) $42 \div 6 = 7$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying Larger Numbers x 50: 9 [A]


 x 10,100,1000
 ÷10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

- Nr 100

 x5
 x 50,25
 Revision
Multiplying 2-digit numbers x 50

Multiplying by 50 is quite easy to do, seeing that it is one half of 100.

Multiplying by 50 can be done by multiplying by 100 then halving the result, or in the opposite order, halve the other number first, then multiply by 100.

For example, $62 \times 50 = (62 \times 100) \div 2 = 6200 \div 2 = 3100$

or: $62 \times 50 = (62 \div 2) \times 100 = 31 \times 100 = 3100$

2 digit numbers x 50

- | | | |
|--|--|--|
| 1) $24 \times 100 = \underline{2,400}$ | 6) $49 \times 50 = \underline{2,450}$ | 11) $76 \times 50 = \underline{3,800}$ |
| 2) $24 \times 50 = \underline{1,200}$ | 7) $73 \times 50 = \underline{3,650}$ | 12) $27 \times 50 = \underline{1,350}$ |
| 3) $52 \times 100 = \underline{5,200}$ | 8) $90 \times 50 = \underline{4,500}$ | 13) $41 \times 50 = \underline{2,050}$ |
| 4) $52 \times 50 = \underline{2,600}$ | 9) $42 \times 50 = \underline{2,100}$ | 14) $93 \times 50 = \underline{4,650}$ |
| 5) $72 \times 50 = \underline{3,600}$ | 10) $74 \times 50 = \underline{3,700}$ | 15) $78 \times 50 = \underline{3,900}$ |

Double these numbers

- | | | |
|--|--|--|
| 16) $110 \times 2 = \underline{220}$ | 20) $702 \times 2 = \underline{1,404}$ | 24) $672 \times 2 = \underline{1,344}$ |
| 17) $793 \times 2 = \underline{1,586}$ | 21) $203 \times 2 = \underline{406}$ | 25) $407 \times 2 = \underline{814}$ |
| 18) $595 \times 2 = \underline{1,190}$ | 22) $136 \times 2 = \underline{272}$ | 26) $785 \times 2 = \underline{1,570}$ |
| 19) $401 \times 2 = \underline{802}$ | 23) $307 \times 2 = \underline{614}$ | 27) $238 \times 2 = \underline{476}$ |

Addition revision

- | | |
|------------------------------|-------------------------------|
| 28) $4 + 8 = \underline{12}$ | 33) $10 + 9 = \underline{19}$ |
| 29) $3 + 7 = \underline{10}$ | 34) $4 + 7 = \underline{11}$ |
| 30) $6 + 7 = \underline{13}$ | 35) $10 + 4 = \underline{14}$ |
| 31) $5 + 5 = \underline{10}$ | 36) $5 + 4 = \underline{9}$ |
| 32) $3 + 4 = \underline{7}$ | 37) $5 + 9 = \underline{14}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 38) $16 - 8 = \underline{8}$ | 43) $16 - 7 = \underline{9}$ |
| 39) $11 - 4 = \underline{7}$ | 44) $12 - 7 = \underline{5}$ |
| 40) $11 - 5 = \underline{6}$ | 45) $13 - 8 = \underline{5}$ |
| 41) $18 - 9 = \underline{9}$ | 46) $16 - 9 = \underline{7}$ |
| 42) $14 - 9 = \underline{5}$ | 47) $17 - 8 = \underline{9}$ |

Multiplication

- | | |
|------------------------------------|------------------------------------|
| 48) $5 \times 5 = \underline{25}$ | 52) $10 \times 6 = \underline{60}$ |
| 49) $9 \times 8 = \underline{72}$ | 53) $10 \times 7 = \underline{70}$ |
| 50) $10 \times 5 = \underline{50}$ | 54) $9 \times 5 = \underline{45}$ |
| 51) $9 \times 9 = \underline{81}$ | 55) $6 \times 7 = \underline{42}$ |

Division

- | | |
|----------------------------------|----------------------------------|
| 56) $64 \div 8 = \underline{8}$ | 60) $35 \div 5 = \underline{7}$ |
| 57) $50 \div 5 = \underline{10}$ | 61) $60 \div 6 = \underline{10}$ |
| 58) $40 \div 8 = \underline{5}$ | 62) $49 \div 7 = \underline{7}$ |
| 59) $80 \div 8 = \underline{10}$ | 63) $25 \div 5 = \underline{5}$ |

Time:

Score:

Multiplying Larger Numbers by 50: 9 [B]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x50,25 Revision
-------------------------------	---------------------------	--------------------------	----------	--------------------

2 digit numbers x 50

- | | | |
|---------------------------------------|--|--|
| 1) $64 \times 50 = \underline{3,200}$ | 6) $43 \times 50 = \underline{2,150}$ | 11) $91 \times 50 = \underline{4,550}$ |
| 2) $24 \times 50 = \underline{1,200}$ | 7) $75 \times 50 = \underline{3,750}$ | 12) $42 \times 50 = \underline{2,100}$ |
| 3) $86 \times 50 = \underline{4,300}$ | 8) $26 \times 50 = \underline{1,300}$ | 13) $28 \times 50 = \underline{1,400}$ |
| 4) $29 \times 50 = \underline{1,450}$ | 9) $57 \times 50 = \underline{2,850}$ | 14) $88 \times 50 = \underline{4,400}$ |
| 5) $41 \times 50 = \underline{2,050}$ | 10) $80 \times 50 = \underline{4,000}$ | 15) $33 \times 50 = \underline{1,650}$ |

Double these numbers

- | | | |
|--|--|--|
| 16) $803 \times 2 = \underline{1,606}$ | 20) $508 \times 2 = \underline{1,016}$ | 24) $285 \times 2 = \underline{570}$ |
| 17) $373 \times 2 = \underline{746}$ | 21) $330 \times 2 = \underline{660}$ | 25) $510 \times 2 = \underline{1,020}$ |
| 18) $121 \times 2 = \underline{242}$ | 22) $521 \times 2 = \underline{1,042}$ | 26) $492 \times 2 = \underline{984}$ |
| 19) $921 \times 2 = \underline{1,842}$ | 23) $503 \times 2 = \underline{1,006}$ | 27) $338 \times 2 = \underline{676}$ |

Add the nice numbers to find the sum (cross them off as you add them).

- | | |
|--|--|
| 28) $7 + 2 + 3 + 1 + 9 = \underline{22}$ | 29) $6 + 1 + 5 + 4 + 2 = \underline{18}$ |
| 30) $2 + 2 + 5 + 5 + 4 = \underline{18}$ | 31) $3 + 8 + 6 + 8 + 8 = \underline{33}$ |

Addition revision

- | | |
|-------------------------------|-------------------------------|
| 32) $10 + 4 = \underline{14}$ | 36) $8 + 9 = \underline{17}$ |
| 33) $8 + 5 = \underline{13}$ | 37) $9 + 9 = \underline{18}$ |
| 34) $6 + 7 = \underline{13}$ | 38) $10 + 6 = \underline{16}$ |
| 35) $7 + 7 = \underline{14}$ | 39) $9 + 4 = \underline{13}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 40) $13 - 5 = \underline{8}$ | 44) $11 - 2 = \underline{9}$ |
| 41) $9 - 4 = \underline{5}$ | 45) $15 - 6 = \underline{9}$ |
| 42) $14 - 6 = \underline{8}$ | 46) $16 - 8 = \underline{8}$ |
| 43) $15 - 7 = \underline{8}$ | 47) $12 - 6 = \underline{6}$ |

Multiplication

- | | |
|-----------------------------------|------------------------------------|
| 48) $7 \times 7 = \underline{49}$ | 53) $10 \times 5 = \underline{50}$ |
| 49) $9 \times 6 = \underline{54}$ | 54) $7 \times 6 = \underline{42}$ |
| 50) $7 \times 8 = \underline{56}$ | 55) $8 \times 7 = \underline{56}$ |
| 51) $8 \times 6 = \underline{48}$ | 56) $10 \times 6 = \underline{60}$ |
| 52) $6 \times 7 = \underline{42}$ | 57) $6 \times 5 = \underline{30}$ |

Division

- | | |
|----------------------------------|----------------------------------|
| 58) $40 \div 8 = \underline{5}$ | 63) $72 \div 8 = \underline{9}$ |
| 59) $56 \div 8 = \underline{7}$ | 64) $81 \div 9 = \underline{9}$ |
| 60) $60 \div 6 = \underline{10}$ | 65) $54 \div 6 = \underline{9}$ |
| 61) $36 \div 6 = \underline{6}$ | 66) $80 \div 8 = \underline{10}$ |
| 62) $90 \div 9 = \underline{10}$ | 67) $42 \div 6 = \underline{7}$ |

Time:

Score:

Multiplying Larger Numbers by 25: 9 [C]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

– Nr 100

 x 50,25
 Revision
Multiplying 2-digit numbers x 25

Multiplying by 25 is quite easy to do as well, seeing that it is one quarter or fourth of 100.

Multiplying by 25 can be done by multiplying by 100 then finding a quarter of the result, or in the opposite order, quarter the other number first, then multiply by 100.

For example, $84 \times 25 = (84 \times 100) \div 4 = 8400 \div 4 = 2100$

or: $84 \times 25 = (84 \div 4) \times 100 = 21 \times 100 = 2100$

2 digit numbers x 25

- | | | |
|---------------------------------------|--|--|
| 1) $44 \times 25 = \underline{1,100}$ | 6) $84 \times 25 = \underline{2,100}$ | 11) $72 \times 25 = \underline{1,800}$ |
| 2) $32 \times 25 = \underline{800}$ | 7) $24 \times 25 = \underline{600}$ | 12) $60 \times 25 = \underline{1,500}$ |
| 3) $24 \times 25 = \underline{600}$ | 8) $80 \times 25 = \underline{2,000}$ | 13) $96 \times 25 = \underline{2,400}$ |
| 4) $48 \times 25 = \underline{1,200}$ | 9) $48 \times 25 = \underline{1,200}$ | 14) $32 \times 25 = \underline{800}$ |
| 5) $36 \times 25 = \underline{900}$ | 10) $64 \times 25 = \underline{1,600}$ | 15) $68 \times 25 = \underline{1,700}$ |

Double these numbers

- | | | |
|--|--|--|
| 16) $711 \times 2 = \underline{1,422}$ | 20) $473 \times 2 = \underline{946}$ | 24) $898 \times 2 = \underline{1,796}$ |
| 17) $207 \times 2 = \underline{414}$ | 21) $294 \times 2 = \underline{588}$ | 25) $674 \times 2 = \underline{1,348}$ |
| 18) $267 \times 2 = \underline{534}$ | 22) $618 \times 2 = \underline{1,236}$ | 26) $597 \times 2 = \underline{1,194}$ |
| 19) $200 \times 2 = \underline{400}$ | 23) $359 \times 2 = \underline{718}$ | 27) $254 \times 2 = \underline{508}$ |

Addition revision

- | | |
|------------------------------|-------------------------------|
| 28) $7 + 6 = \underline{13}$ | 33) $6 + 8 = \underline{14}$ |
| 29) $5 + 5 = \underline{10}$ | 34) $10 + 6 = \underline{16}$ |
| 30) $6 + 6 = \underline{12}$ | 35) $4 + 8 = \underline{12}$ |
| 31) $5 + 8 = \underline{13}$ | 36) $7 + 7 = \underline{14}$ |
| 32) $8 + 4 = \underline{12}$ | 37) $6 + 5 = \underline{11}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 38) $11 - 3 = \underline{8}$ | 43) $16 - 9 = \underline{7}$ |
| 39) $15 - 7 = \underline{8}$ | 44) $18 - 9 = \underline{9}$ |
| 40) $13 - 4 = \underline{9}$ | 45) $8 - 3 = \underline{5}$ |
| 41) $13 - 5 = \underline{8}$ | 46) $15 - 8 = \underline{7}$ |
| 42) $15 - 6 = \underline{9}$ | 47) $12 - 3 = \underline{9}$ |

Multiplication

- | | |
|-----------------------------------|------------------------------------|
| 48) $6 \times 7 = \underline{42}$ | 52) $9 \times 7 = \underline{63}$ |
| 49) $5 \times 9 = \underline{45}$ | 53) $8 \times 5 = \underline{40}$ |
| 50) $8 \times 8 = \underline{64}$ | 54) $8 \times 7 = \underline{56}$ |
| 51) $5 \times 8 = \underline{40}$ | 55) $10 \times 5 = \underline{50}$ |

Division

- | | |
|----------------------------------|---------------------------------|
| 56) $90 \div 9 = \underline{10}$ | 60) $63 \div 7 = \underline{9}$ |
| 57) $36 \div 6 = \underline{6}$ | 61) $54 \div 9 = \underline{6}$ |
| 58) $40 \div 8 = \underline{5}$ | 62) $72 \div 8 = \underline{9}$ |
| 59) $35 \div 5 = \underline{7}$ | 63) $54 \div 6 = \underline{9}$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Multiplying Larger Numbers by 25: 9 [D]


 x 10,100,1000
 ÷10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

- Nr 100

 x5
 Revision
2 digit numbers x 25

- 1) $28 \times 25 = \underline{700}$ 4) $64 \times 25 = \underline{1,600}$ 7) $48 \times 25 = \underline{1,200}$
 2) $68 \times 25 = \underline{1,700}$ 5) $44 \times 25 = \underline{1,100}$ 8) $28 \times 25 = \underline{700}$
 3) $56 \times 25 = \underline{1,400}$ 6) $28 \times 25 = \underline{700}$ 9) $40 \times 25 = \underline{1,000}$

2 digit numbers x 50

- 10) $82 \times 50 = \underline{4,100}$ 13) $50 \times 50 = \underline{2,500}$ 16) $80 \times 50 = \underline{4,000}$
 11) $88 \times 50 = \underline{4,400}$ 14) $25 \times 50 = \underline{1,250}$ 17) $47 \times 50 = \underline{2,350}$
 12) $67 \times 50 = \underline{3,350}$ 15) $48 \times 50 = \underline{2,400}$ 18) $84 \times 50 = \underline{4,200}$

Add the "nice" numbers to find the sum (cross them off as you add them).

- 19) $7 + 1 + 2 + 2 + 6 + 2 = \underline{20}$ 23) $5 + 3 + 7 + 9 + 1 + 8 = \underline{33}$
 20) $3 + 3 + 3 + 8 + 8 + 6 = \underline{31}$ 24) $9 + 9 + 4 + 7 + 9 + 7 = \underline{45}$
 21) $9 + 6 + 3 + 9 + 9 + 2 = \underline{38}$ 25) $1 + 2 + 1 + 7 + 6 + 6 = \underline{23}$
 22) $3 + 3 + 6 + 7 + 7 + 9 = \underline{35}$ 26) $1 + 1 + 5 + 7 + 5 + 5 = \underline{24}$

Addition revision

- 27) $9 + 6 = \underline{15}$ 32) $3 + 9 = \underline{12}$
 28) $6 + 7 = \underline{13}$ 33) $4 + 6 = \underline{10}$
 29) $6 + 9 = \underline{15}$ 34) $7 + 9 = \underline{16}$
 30) $8 + 5 = \underline{13}$ 35) $4 + 8 = \underline{12}$
 31) $8 + 6 = \underline{14}$ 36) $6 + 6 = \underline{12}$

Subtraction revision

- 37) $12 - 5 = \underline{7}$ 42) $17 - 9 = \underline{8}$
 38) $15 - 8 = \underline{7}$ 43) $14 - 6 = \underline{8}$
 39) $15 - 7 = \underline{8}$ 44) $11 - 6 = \underline{5}$
 40) $12 - 6 = \underline{6}$ 45) $16 - 7 = \underline{9}$
 41) $14 - 7 = \underline{7}$ 46) $16 - 8 = \underline{8}$

Multiplication

- 47) $6 \times 7 = \underline{42}$ 51) $9 \times 5 = \underline{45}$
 48) $10 \times 7 = \underline{70}$ 52) $5 \times 8 = \underline{40}$
 49) $9 \times 7 = \underline{63}$ 53) $5 \times 7 = \underline{35}$
 50) $7 \times 6 = \underline{42}$ 54) $10 \times 5 = \underline{50}$

Division

- 55) $60 \div 6 = \underline{10}$ 59) $64 \div 8 = \underline{8}$
 56) $48 \div 6 = \underline{8}$ 60) $40 \div 5 = \underline{8}$
 57) $56 \div 7 = \underline{8}$ 61) $40 \div 8 = \underline{5}$
 58) $81 \div 9 = \underline{9}$ 62) $42 \div 7 = \underline{6}$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Revision: 10 [A]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	– Nr 100 x5	x 50,25 Revision
-------------------------------	---------------------------	--------------------------	----------------	---------------------

Multiply these numbers including decimals

- 1) $426 \times 1,000 = \underline{426,000}$ 6) $975 \times 1,000 = \underline{975,000}$
- 2) $660 \times 10 = \underline{6,600}$ 7) $0.509 \times 10 = \underline{5.090}$
- 3) $0.4 \times 100 = \underline{40.0}$ 8) $95.8 \times 100 = \underline{9,580.0}$
- 4) $8.59 \times 100 = \underline{859.00}$ 9) $0.604 \times 100 = \underline{60.400}$
- 5) $2.00 \times 1,000 = \underline{2,000.00}$ 10) $325 \times 1,000 = \underline{325,000}$

2 digit numbers x 25

- 11) $82 \times 25 = \underline{2,050}$ 14) $28 \times 25 = \underline{700}$ 17) $64 \times 25 = \underline{1,600}$
- 12) $60 \times 25 = \underline{1,500}$ 15) $44 \times 25 = \underline{1,100}$ 18) $96 \times 25 = \underline{2,400}$
- 13) $72 \times 25 = \underline{1,800}$ 16) $40 \times 25 = \underline{1,000}$ 19) $68 \times 25 = \underline{1,700}$

2 digit numbers x 50

- 20) $25 \times 50 = \underline{1,250}$ 23) $76 \times 50 = \underline{3,800}$ 26) $92 \times 50 = \underline{4,600}$
- 21) $41 \times 50 = \underline{2,050}$ 24) $78 \times 50 = \underline{3,900}$ 27) $49 \times 50 = \underline{2,450}$
- 22) $46 \times 50 = \underline{2,300}$ 25) $74 \times 50 = \underline{3,700}$ 28) $33 \times 50 = \underline{1,650}$

Add the nice numbers to find the sum (cross them off as you add them).

- 29) $7 + 6 + 5 + 6 + 9 + 5 = \underline{38}$ 33) $3 + 7 + 3 + 4 + 2 + 8 = \underline{27}$
- 30) $5 + 2 + 4 + 1 + 1 + 7 = \underline{20}$ 34) $4 + 3 + 8 + 4 + 2 + 2 = \underline{23}$
- 31) $3 + 5 + 6 + 2 + 3 + 6 = \underline{25}$ 35) $5 + 6 + 3 + 5 + 8 + 9 = \underline{36}$
- 32) $3 + 7 + 7 + 5 + 8 + 4 = \underline{34}$ 36) $2 + 7 + 6 + 9 + 8 + 3 = \underline{35}$

Addition revision

- 37) $4 + 5 = \underline{9}$ 41) $4 + 4 = \underline{8}$
- 38) $3 + 4 = \underline{7}$ 42) $8 + 4 = \underline{12}$
- 39) $4 + 9 = \underline{13}$ 43) $5 + 8 = \underline{13}$
- 40) $10 + 7 = \underline{17}$ 44) $7 + 7 = \underline{14}$

Subtraction revision

- 45) $10 - 2 = \underline{8}$ 49) $10 - 5 = \underline{5}$
- 46) $14 - 6 = \underline{8}$ 50) $8 - 2 = \underline{6}$
- 47) $18 - 9 = \underline{9}$ 51) $15 - 7 = \underline{8}$
- 48) $17 - 8 = \underline{9}$ 52) $17 - 9 = \underline{8}$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Revision: 10 [B]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x5	x 50,25
					Revision

Addition near 100

- 1) $28 + 98 = 126$ 6) $41 + 93 = 134$ 11) $21 + 104 = 125$
 2) $30 + 101 = 131$ 7) $39 + 96 = 135$ 12) $36 + 103 = 139$
 3) $42 + 102 = 144$ 8) $19 + 95 = 114$ 13) $20 + 106 = 126$
 4) $21 + 93 = 114$ 9) $12 + 92 = 104$ 14) $31 + 107 = 138$
 5) $36 + 104 = 140$ 10) $12 + 93 = 105$ 15) $20 + 97 = 117$

Multiply these numbers including decimals

- 16) $89.2 \times 10 = 892.0$ 21) $456 \times 10 = 4,560$
 17) $51.0 \times 100 = 5,100.0$ 22) $69.9 \times 100 = 6,990.0$
 18) $927 \times 1,000 = 927,000$ 23) $62.8 \times 1,000 = 62,800.0$
 19) $539 \times 1,000 = 539,000$ 24) $123 \times 1,000 = 123,000$
 20) $116 \times 10 = 1,160$ 25) $0.656 \times 10 = 6.560$

2 digit numbers x 25

- 26) $60 \times 25 = 1,500$ 29) $32 \times 25 = 800$ 32) $60 \times 25 = 1,500$
 27) $24 \times 25 = 600$ 30) $24 \times 25 = 600$ 33) $48 \times 25 = 1,200$
 28) $96 \times 25 = 2,400$ 31) $52 \times 25 = 1,300$ 34) $72 \times 25 = 1,800$

2 digit numbers x 50

- 35) $83 \times 50 = 4,150$ 38) $25 \times 50 = 1,250$ 41) $81 \times 50 = 4,050$
 36) $92 \times 50 = 4,600$ 39) $68 \times 50 = 3,400$ 42) $95 \times 50 = 4,750$
 37) $97 \times 50 = 4,850$ 40) $89 \times 50 = 4,450$ 43) $49 \times 50 = 2,450$

Add the nice numbers to find the sum (cross them off as you add them).

- 44) $4 + 3 + 8 + 3 + 5 + 7 = 30$ 47) $3 + 6 + 6 + 7 + 7 + 2 = 31$
 45) $3 + 3 + 5 + 6 + 8 + 4 = 29$ 48) $4 + 6 + 2 + 9 + 4 + 5 = 30$
 46) $2 + 8 + 2 + 3 + 9 + 9 = 33$ 49) $8 + 3 + 8 + 8 + 8 + 5 = 40$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Revision: 10 [C]


 x 10,100,1000
 ÷ 10,100,1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

– Nr 100

 x 50,25
 x5

Revision

Divide these numbers

1) $7,984 \div 10 = \underline{798.4}$

6) $77.8 \div 100 = \underline{0.778}$

2) $6,860 \div 1,000 = \underline{6.86}$

7) $834 \div 1,000 = \underline{0.834}$

3) $878 \div 100 = \underline{8.78}$

8) $24.3 \div 100 = \underline{0.243}$

4) $82.24 \div 10 = \underline{8.224}$

9) $8.06 \div 10 = \underline{0.806}$

5) $20.47 \div 10 = \underline{2.047}$

10) $23.6 \div 100 = \underline{0.236}$

Addition near 100

11) $102 + 40 = \underline{142}$

16) $100 + 15 = \underline{115}$

21) $101 + 29 = \underline{130}$

12) $106 + 34 = \underline{140}$

17) $96 + 39 = \underline{135}$

22) $90 + 24 = \underline{114}$

13) $90 + 30 = \underline{120}$

18) $96 + 44 = \underline{140}$

23) $100 + 44 = \underline{144}$

14) $102 + 29 = \underline{131}$

19) $104 + 14 = \underline{118}$

24) $105 + 44 = \underline{149}$

15) $103 + 16 = \underline{119}$

20) $102 + 11 = \underline{113}$

25) $104 + 37 = \underline{141}$

Add the nice numbers to find the sum (cross them off as you add them).

26) $8 + 5 + 2 + 2 + 7 + 3 = \underline{27}$

30) $5 + 9 + 4 + 3 + 1 + 5 = \underline{27}$

27) $8 + 6 + 5 + 3 + 1 + 6 = \underline{29}$

31) $6 + 6 + 4 + 7 + 4 + 4 = \underline{31}$

28) $5 + 2 + 6 + 9 + 7 + 4 = \underline{33}$

32) $7 + 9 + 7 + 5 + 4 + 8 = \underline{40}$

29) $2 + 3 + 1 + 3 + 2 + 7 = \underline{18}$

33) $7 + 3 + 8 + 4 + 9 + 6 = \underline{37}$

Double these numbers

34) $875 \times 2 = \underline{1,750}$

36) $845 \times 2 = \underline{1,690}$

38) $353 \times 2 = \underline{706}$

35) $835 \times 2 = \underline{1,670}$

37) $557 \times 2 = \underline{1,114}$

39) $686 \times 2 = \underline{1,372}$

Addition revision

40) $3 + 5 = \underline{8}$

43) $6 + 6 = \underline{12}$

41) $6 + 7 = \underline{13}$

44) $4 + 9 = \underline{13}$

42) $3 + 6 = \underline{9}$

45) $4 + 4 = \underline{8}$

Subtraction revision

46) $11 - 5 = \underline{6}$

49) $14 - 6 = \underline{8}$

47) $12 - 4 = \underline{8}$

50) $16 - 9 = \underline{7}$

48) $10 - 3 = \underline{7}$

51) $13 - 8 = \underline{5}$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Revision: 10 [D]



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100	x 50,25	Revision
-------------------------------	---------------------------	--------------------------	----------	---------	----------

Addition near 100

- 1) $33 + 96 = 129$ 6) $26 + 95 = 121$ 11) $14 + 108 = 122$
 2) $34 + 108 = 142$ 7) $18 + 107 = 125$ 12) $11 + 101 = 112$
 3) $38 + 96 = 134$ 8) $20 + 96 = 116$ 13) $43 + 107 = 150$
 4) $26 + 102 = 128$ 9) $32 + 96 = 128$ 14) $25 + 106 = 131$
 5) $29 + 107 = 136$ 10) $31 + 101 = 132$ 15) $39 + 101 = 140$

Multiply these numbers including decimals

- 16) $5.78 \times 1,000 = 5,780.00$ 21) $5.19 \times 1,000 = 5,190.00$
 17) $2.00 \times 10 = 20.00$ 22) $0.291 \times 10 = 2.910$
 18) $39.9 \times 100 = 3,990.0$ 23) $955 \times 100 = 95,500$
 19) $29.6 \times 100 = 2,960.0$ 24) $280 \times 100 = 28,000$
 20) $24.7 \times 10 = 247.0$ 25) $3.67 \times 10 = 36.70$

2 digit numbers x 25

- 26) $64 \times 25 = 1,600$ 29) $32 \times 25 = 800$ 32) $82 \times 25 = 2,050$
 27) $36 \times 25 = 900$ 30) $28 \times 25 = 700$ 33) $60 \times 25 = 1,500$
 28) $52 \times 25 = 1,300$ 31) $20 \times 25 = 500$ 34) $16 \times 25 = 400$

2 digit numbers x 50

- 35) $81 \times 50 = 4,050$ 38) $52 \times 50 = 2,600$ 41) $57 \times 50 = 2,850$
 36) $53 \times 50 = 2,650$ 39) $98 \times 50 = 4,900$ 42) $79 \times 50 = 3,950$
 37) $74 \times 50 = 3,700$ 40) $26 \times 50 = 1,300$ 43) $31 \times 50 = 1,550$

Add the nice numbers to find the sum (cross them off as you add them).

- 44) $8 + 6 + 1 + 6 + 7 + 7 = 35$ 47) $5 + 8 + 3 + 2 + 1 + 6 = 25$
 45) $1 + 4 + 8 + 2 + 5 + 8 = 28$ 48) $5 + 2 + 8 + 7 + 7 + 4 = 33$
 46) $1 + 7 + 9 + 4 + 7 + 5 = 33$ 49) $1 + 5 + 6 + 4 + 6 + 6 = 28$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Time:

Score:

Check Up A



$\times 10, 100, 1000$	Doubling Lg	Nice Numbers	– Nr 100	$\times 50, 25$
$\div 10, 100, 1000$	Halving Lg	+ Nr 100	$\times 5$	Revision

 $\times 10, \times 100, \times 1,000$

1) $73.8 \times 1,000 = \underline{73,800.0}$

7) $0.793 \times 1,000 = \underline{793.000}$

2) $5.65 \times 100 = \underline{565.00}$

8) $4.88 \times 100 = \underline{488.00}$

3) $702 \times 10 = \underline{7,020}$

9) $65.0 \times 10 = \underline{650.0}$

4) $79 \times 1,000 = \underline{79,000}$

10) $1.80 \times 10 = \underline{18.00}$

5) $27.3 \times 10 = \underline{273.0}$

11) $103 \times 1,000 = \underline{103,000}$

6) $41.9 \times 1,000 = \underline{41,900.0}$

12) $373 \times 100 = \underline{37,300}$

 $\div 10, \div 100, \div 1000$

13) $6,831 \div 1,000 = \underline{6.831}$

19) $56,392 \div 1,000 = \underline{56.392}$

14) $5 \div 100 = \underline{0.05}$

20) $2,186 \div 10 = \underline{218.6}$

15) $8,077 \div 10 = \underline{807.7}$

21) $1,400 \div 100 = \underline{14}$

16) $205 \div 1,000 = \underline{0.205}$

22) $62,002 \div 1,000 = \underline{62.002}$

17) $70 \div 1,000 = \underline{0.07}$

23) $10,185 \div 10 = \underline{1,018.5}$

18) $5,008 \div 100 = \underline{50.08}$

24) $15,009 \div 100 = \underline{150.09}$

Addition revision

25) $4 + 9 = \underline{13}$

30) $5 + 7 = \underline{12}$

26) $7 + 4 = \underline{11}$

31) $8 + 6 = \underline{14}$

27) $5 + 8 = \underline{13}$

32) $7 + 9 = \underline{16}$

28) $7 + 5 = \underline{12}$

33) $6 + 8 = \underline{14}$

29) $6 + 5 = \underline{11}$

34) $9 + 7 = \underline{16}$

Subtraction revision

45) $16 - 8 = \underline{8}$

50) $11 - 2 = \underline{9}$

46) $16 - 9 = \underline{7}$

51) $14 - 5 = \underline{9}$

47) $17 - 8 = \underline{9}$

52) $14 - 8 = \underline{6}$

48) $13 - 8 = \underline{5}$

53) $9 - 2 = \underline{7}$

49) $13 - 7 = \underline{6}$

54) $11 - 5 = \underline{6}$

Multiplication revision

35) $7 \times 4 = \underline{28}$

40) $8 \times 8 = \underline{64}$

36) $8 \times 9 = \underline{72}$

41) $4 \times 6 = \underline{24}$

37) $9 \times 9 = \underline{81}$

42) $6 \times 6 = \underline{36}$

38) $10 \times 7 = \underline{70}$

43) $9 \times 8 = \underline{72}$

39) $5 \times 8 = \underline{40}$

44) $5 \times 6 = \underline{30}$

Division revision

55) $30 \div 6 = \underline{5}$

60) $54 \div 6 = \underline{9}$

56) $40 \div 8 = \underline{5}$

61) $42 \div 7 = \underline{6}$

57) $72 \div 8 = \underline{9}$

62) $72 \div 9 = \underline{8}$

58) $32 \div 4 = \underline{8}$

63) $24 \div 3 = \underline{8}$

59) $30 \div 5 = \underline{6}$

64) $35 \div 7 = \underline{5}$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 2D worksheet. The teacher should record each student's score and the time taken.

Time:

Score:

Check Up B



$\times 10, 100, 1000$	Doubling Lg	Nice Numbers	– Nr 100	$\times 50, 25$
$\div 10, 100, 1000$	Halving Lg	+ Nr 100	$\times 5$	Revision

Double these numbers

- 1) $43 \times 2 = 86$ 6) $49 \times 2 = 98$ 11) $168 \times 2 = 336$
 2) $24 \times 2 = 48$ 7) $27 \times 2 = 54$ 12) $330 \times 2 = 660$
 3) $341 \times 2 = 682$ 8) $486 \times 2 = 972$ 13) $355 \times 2 = 710$
 4) $253 \times 2 = 506$ 9) $164 \times 2 = 328$ 14) $657 \times 2 = 1,314$
 5) $624 \times 2 = 1,248$ 10) $925 \times 2 = 1,850$ 15) $867 \times 2 = 1,734$

Halve these numbers

- 16) $42 \div 2 = 21$ 17) $500 \div 2 = 250$ 26) $740 \div 2 = 370$ 27) $148 \div 2 = 74$
 18) $56 \div 2 = 28$ 19) $450 \div 2 = 225$ 28) $314 \div 2 = 157$ 29) $704 \div 2 = 352$
 20) $48 \div 2 = 24$ 21) $326 \div 2 = 163$ 30) $674 \div 2 = 337$ 31) $726 \div 2 = 363$
 22) $30 \div 2 = 15$ 23) $842 \div 2 = 421$ 32) $948 \div 2 = 474$ 33) $970 \div 2 = 485$
 24) $38 \div 2 = 19$ 25) $184 \div 2 = 92$ 34) $870 \div 2 = 435$ 35) $956 \div 2 = 478$

 $\times 10, \times 100$ or $\times 1000$, including decimals

- 36) $4.08 \times 100 = 408.00$
 37) $34 \times 100 = 3,400$
 38) $8.70 \times 1,000 = 8,700.00$
 39) $40.2 \times 10 = 402.0$
 40) $0.75 \times 1,000 = 750.00$

Divide these numbers

- 41) $2,391 \div 10 = 239.1$
 42) $7,796 \div 100 = 77.96$
 43) $146.1 \div 100 = 1.461$
 44) $1,171 \div 1,000 = 1.171$
 45) $1,548 \div 10 = 154.8$

Addition revision

- 46) $6 + 6 = 12$ 51) $7 + 5 = 12$
 47) $4 + 6 = 10$ 52) $3 + 8 = 11$
 48) $4 + 5 = 9$ 53) $3 + 4 = 7$
 49) $7 + 4 = 11$ 54) $9 + 9 = 18$
 50) $9 + 7 = 16$ 55) $4 + 7 = 11$

Subtraction revision

- 56) $14 - 6 = 8$ 61) $16 - 9 = 7$
 57) $17 - 9 = 8$ 62) $12 - 7 = 5$
 58) $13 - 6 = 7$ 63) $15 - 6 = 9$
 59) $16 - 8 = 8$ 64) $16 - 7 = 9$
 60) $9 - 0 = 9$ 65) $13 - 8 = 5$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 4D worksheet. The teacher should record each student's score and the time taken.

Time:

Score:

Check Up C



x 10,100,1000	Doubling Lg	Nice Numbers	- Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|--|---|
| 1) $8 + 2 + 2 + 3 + 8 + 2 =$ <u>25</u> | 6) $5 + 2 + 1 + 9 + 6 + 4 =$ <u>27</u> |
| 2) $8 + 8 + 8 + 6 + 8 + 1 =$ <u>39</u> | 7) $6 + 3 + 9 + 9 + 6 + 4 =$ <u>37</u> |
| 3) $8 + 1 + 4 + 8 + 3 + 4 =$ <u>28</u> | 8) $7 + 6 + 1 + 7 + 4 + 3 =$ <u>28</u> |
| 4) $4 + 7 + 2 + 1 + 2 + 8 =$ <u>24</u> | 9) $5 + 3 + 2 + 2 + 8 + 5 =$ <u>25</u> |
| 5) $8 + 8 + 8 + 5 + 1 + 2 =$ <u>32</u> | 10) $4 + 8 + 6 + 2 + 2 + 8 =$ <u>30</u> |

Addition near 100

- | | | |
|-----------------------------|-----------------------------|-----------------------------|
| 11) $94 + 35 =$ <u>129</u> | 16) $108 + 41 =$ <u>149</u> | 21) $101 + 37 =$ <u>138</u> |
| 12) $96 + 18 =$ <u>114</u> | 17) $102 + 35 =$ <u>137</u> | 22) $95 + 31 =$ <u>126</u> |
| 13) $106 + 21 =$ <u>127</u> | 18) $97 + 14 =$ <u>111</u> | 23) $99 + 30 =$ <u>129</u> |
| 14) $101 + 33 =$ <u>134</u> | 19) $104 + 44 =$ <u>148</u> | 24) $98 + 38 =$ <u>136</u> |
| 15) $92 + 18 =$ <u>110</u> | 20) $103 + 31 =$ <u>134</u> | 25) $96 + 24 =$ <u>120</u> |

x10, x100 or x1000, including decimals

- 26) $6.568 \times 100 =$ 656.800
- 27) $0.95 \times 1,000 =$ 950.00
- 28) $507 \times 1,000 =$ 507,000
- 29) $6,002 \times 100 =$ 600,200
- 30) $92.4 \times 1,000 =$ 92,400.0

÷10, ÷100 or ÷1000, including decimals

- 31) $50.6 \div 100 =$ 0.506
- 32) $6,036 \div 1,000 =$ 6.036
- 33) $8,502 \div 10 =$ 850.2
- 34) $0.05 \div 10 =$ 0.005
- 35) $2,108 \div 10 =$ 210.8

Double these numbers

- 36) $24 \times 2 =$ 48
- 37) $38 \times 2 =$ 76
- 38) $402 \times 2 =$ 804
- 39) $827 \times 2 =$ 1,654
- 40) $379 \times 2 =$ 758

Halve these numbers

- 41) $62 \div 2 =$ 31
- 42) $428 \div 2 =$ 214
- 43) $836 \div 2 =$ 418
- 44) $504 \div 2 =$ 252
- 45) $972 \div 2 =$ 486

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 6D worksheet. The teacher should record each student's score and the time taken.

Time:

Score:

Check Up D



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	- Nr 100 x5	x 50,25 Revision
-------------------------------	---------------------------	--------------------------	----------------	---------------------

Subtraction near 100

- 1) $237 - 94 = 143$ 6) $234 - 98 = 136$ 11) $118 - 98 = 20$
 2) $146 - 105 = 41$ 7) $133 - 101 = 32$ 12) $623 - 107 = 516$
 3) $135 - 102 = 33$ 8) $321 - 97 = 224$ 13) $138 - 106 = 32$
 4) $113 - 106 = 7$ 9) $533 - 102 = 431$ 14) $119 - 95 = 24$
 5) $123 - 104 = 19$ 10) $120 - 101 = 19$ 15) $129 - 98 = 31$

2-digit numbers x 5

- 16) $42 \times 5 = 210$ 21) $96 \times 5 = 480$ 26) $82 \times 5 = 410$ 31) $68 \times 5 = 340$
 17) $28 \times 5 = 140$ 22) $22 \times 5 = 110$ 27) $48 \times 5 = 240$ 32) $81 \times 5 = 405$
 18) $36 \times 5 = 180$ 23) $56 \times 5 = 280$ 28) $26 \times 5 = 130$ 33) $38 \times 5 = 190$
 19) $83 \times 5 = 415$ 24) $47 \times 5 = 235$ 29) $58 \times 5 = 290$ 34) $56 \times 5 = 280$
 20) $41 \times 5 = 205$ 25) $62 \times 5 = 310$ 30) $72 \times 5 = 360$ 35) $71 \times 5 = 355$

Addition near 100

- 36) $99 + 44 = 143$
 37) $103 + 29 = 132$
 38) $108 + 35 = 143$
 39) $95 + 25 = 120$
 40) $98 + 21 = 119$

Add the "nice" numbers to find the sum

- 41) $9 + 2 + 3 + 1 + 1 + 2 = 18$
 42) $5 + 7 + 8 + 2 + 8 + 4 = 34$
 43) $9 + 9 + 9 + 6 + 4 + 9 = 46$
 44) $5 + 4 + 6 + 4 + 6 + 8 = 33$

x10, x100 or x1000, including decimals

- 45) $5.508 \times 100 = 550.800$
 46) $72.4 \times 1,000 = 72,400.0$
 47) $0.35 \times 1,000 = 350.00$
 48) $407 \times 1,000 = 407,000$
 49) $8,005 \times 100 = 800,500$

÷10, ÷100 or ÷1000, including decimals

- 50) $30.6 \div 100 = 0.306$
 51) $8,036 \div 1,000 = 8.036$
 52) $0.08 \div 10 = 0.008$
 53) $0.7 \div 10 = 0.07$
 54) $600 \div 1,000 = 0.6$

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 6D worksheet. The teacher should record each student's score and the time taken.

Time:

Score:

Check Up E


 x 10, 100, 1000
 ÷ 10, 100, 1000

 Doubling Lg
 Halving Lg

 Nice Numbers
 + Nr 100

- Nr 100

 x 50, 25
 Revision
2 digit numbers x 50

- 1) $42 \times 50 = \underline{2,100}$ 4) $80 \times 50 = \underline{4,000}$ 7) $88 \times 50 = \underline{4,400}$
- 2) $82 \times 50 = \underline{4,100}$ 5) $64 \times 50 = \underline{3,200}$ 8) $38 \times 50 = \underline{1,900}$
- 3) $50 \times 50 = \underline{2,500}$ 6) $67 \times 50 = \underline{3,350}$ 9) $25 \times 50 = \underline{1,250}$

2 digit numbers x 25

- 10) $40 \times 25 = \underline{1,000}$ 13) $28 \times 25 = \underline{700}$ 16) $68 \times 25 = \underline{1,700}$
- 11) $84 \times 25 = \underline{2,100}$ 14) $42 \times 25 = \underline{1,050}$ 17) $92 \times 25 = \underline{2,300}$
- 12) $32 \times 25 = \underline{800}$ 15) $56 \times 25 = \underline{1,400}$ 18) $80 \times 25 = \underline{2,000}$

Addition near 100

- 19) $99 + 44 = \underline{143}$
- 20) $103 + 29 = \underline{132}$
- 21) $108 + 35 = \underline{143}$
- 22) $95 + 25 = \underline{120}$
- 23) $98 + 21 = \underline{119}$

Subtraction near 100

- 24) $140 - 94 = \underline{46}$
- 25) $116 - 96 = \underline{20}$
- 26) $119 - 103 = \underline{16}$
- 27) $136 - 96 = \underline{40}$
- 28) $251 - 103 = \underline{148}$

Add the "nice" numbers to find the sum (cross them off as you add them).

- 29) $2 + 9 + 4 + 1 + 8 + 5 = \underline{29}$ 32) $6 + 2 + 5 + 2 + 2 + 8 = \underline{25}$
- 30) $4 + 8 + 3 + 8 + 4 + 1 = \underline{28}$ 33) $8 + 3 + 2 + 3 + 3 + 1 = \underline{20}$
- 31) $6 + 6 + 6 + 6 + 3 + 5 = \underline{32}$ 34) $8 + 4 + 5 + 3 + 5 + 5 = \underline{30}$

x10, x100 or x1000, including decimals

- 35) $42.7 \times 100 = \underline{4,270.0}$
- 36) $6.63 \times 1,000 = \underline{6,630.00}$
- 37) $89.003 \times 10 = \underline{890.030}$

÷10, ÷100 or ÷1000, including decimals

- 38) $8,521 \div 10 = \underline{852.1}$
- 39) $9,757 \div 10 = \underline{975.7}$
- 40) $6,073 \div 10 = \underline{607.3}$

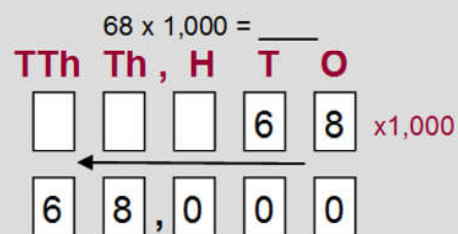
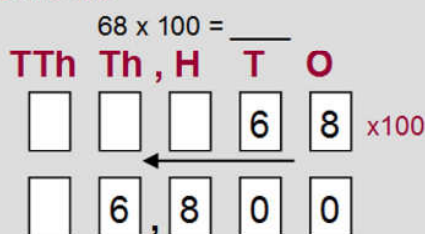
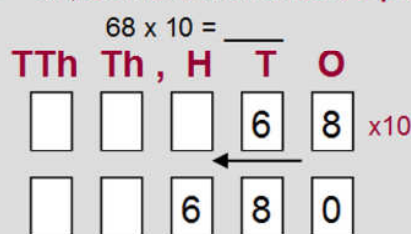
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets". This Check Up is for assessment to be given upon completion of the 10D worksheet. The teacher should record each student's score and the time taken.



Information for Parents: Multiplying by 10, 100 or 1,000

To x10, x100, x1,000: Use a number slide.

- x10 move the numbers 1 place. The number is getting bigger, so move each digit to the left.
- x100 move the numbers 2 places to the left.
- x1,000 move the numbers 3 places to the left.



Note to parents: It is not recommended to talk of "adding zeroes", since this is not an accurate description of the process. Also it causes problems when numbers with decimals are multiplied. Rather, talk about moving the digits to new locations to make the number bigger by a power of ten.

x 10, x 100, x 1,000

- 1) $64 \times 1,000 = 64,000$
- 2) $21 \times 10 = 210$
- 3) $70 \times 10 = 700$
- 4) $31 \times 1,000 = 31,000$
- 5) $20 \times 100 = 2,000$
- 6) $5 \times 1,000 = 5,000$
- 7) $65 \times 10 = 650$
- 8) $28 \times 100 = 2,800$
- 9) $41 \times 100 = 4,100$
- 10) $78 \times 10 = 780$

- 11) $36 \times 10 = 360$
- 12) $31 \times 100 = 3,100$
- 13) $96 \times 1,000 = 96,000$
- 14) $97 \times 1,000 = 97,000$
- 15) $47 \times 100 = 4,700$
- 16) $3 \times 1,000 = 3,000$
- 17) $76 \times 1,000 = 76,000$
- 18) $82 \times 100 = 8,200$
- 19) $89 \times 100 = 8,900$
- 20) $75 \times 1,000 = 75,000$

Addition revision

- 21) $10 + 7 = 17$
- 22) $8 + 4 = 12$
- 23) $3 + 9 = 12$
- 24) $4 + 6 = 10$
- 25) $3 + 8 = 11$
- 26) $9 + 5 = 14$
- 27) $8 + 8 = 16$
- 28) $8 + 5 = 13$

Subtraction revision

- 29) $17 - 8 = 9$
- 30) $14 - 6 = 8$
- 31) $16 - 8 = 8$
- 32) $13 - 8 = 5$
- 33) $8 - 3 = 5$
- 34) $12 - 7 = 5$
- 35) $15 - 7 = 8$
- 36) $10 - 5 = 5$



x 10,100,1000

÷10,100,1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

- Nr 100

x5

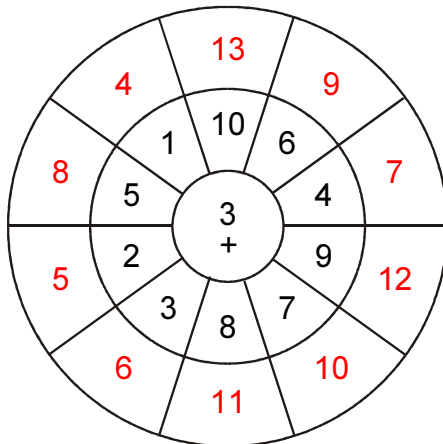
x 50,25

Revision

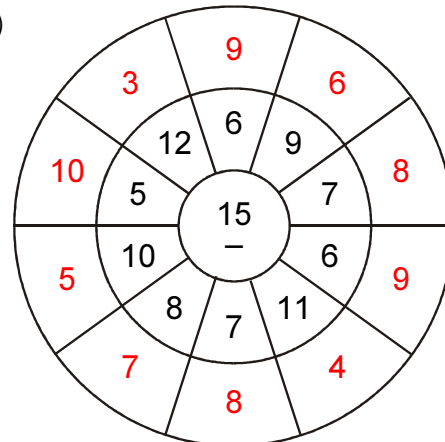
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

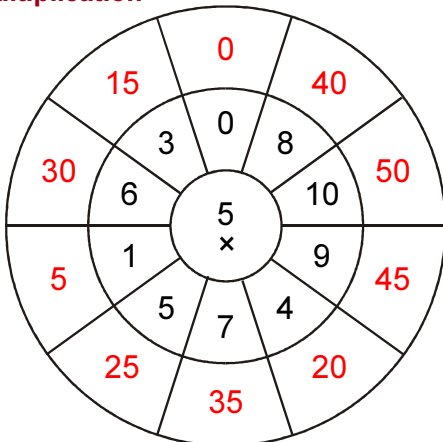
1)

**Subtraction**

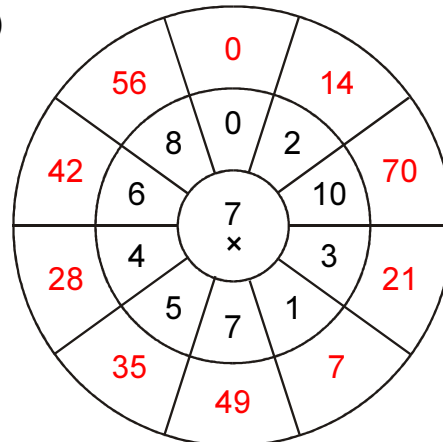
2)

**Multiplication**

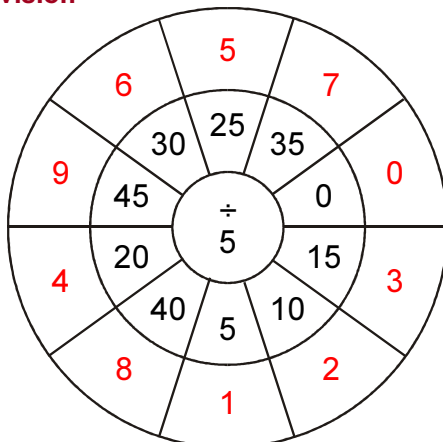
3)



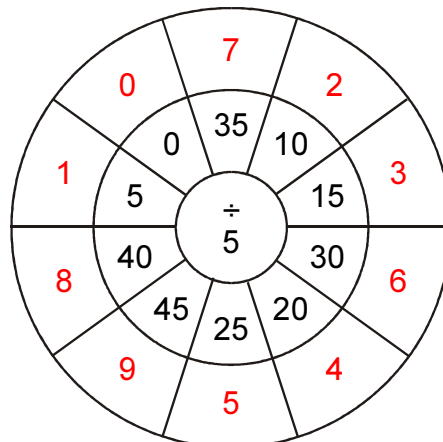
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



Information for Parents: Dividing by 10, 100 or 1,000

To ÷10, ÷100, ÷1,000: Use the number slide.

- ÷10 move the numbers 1 place. Which way? **Think!** The numbers need to get smaller! So which way?
- ÷100 move the numbers 2 places.
- ÷1,000 move the numbers 3 places.

$3,605 \div 10 = \underline{\quad}$

$78,040 \div 100 = \underline{\quad}$

$47,600 \div 1,000 = \underline{\quad}$

TTh	Th	H	T	O	.	t	TTh	Th	H	T	O	.	t	TTh	Th	H	T	O	.	t	
	3	,	6	0	5		÷10	7	8	,	0	4	0	÷100	4	7	,	6	0	0	0
			3	6	0	.5				7	8	0.4					4	7	.6		

Note to parents: It is not recommended to talk of "removing zeroes", since this is not an accurate description of the process. It also complicates the process when dealing with decimals. Rather, talk about moving the digits to new locations to make the number smaller by a power of ten.

÷ 10, ÷ 100, ÷ 1000

- | | |
|---|--|
| 1) $9,720 \div 10 = \underline{972}$ | 11) $71,000 \div 1,000 = \underline{71}$ |
| 2) $230 \div 10 = \underline{23}$ | 12) $79,160 \div 10 = \underline{7,916}$ |
| 3) $5,700 \div 100 = \underline{57}$ | 13) $66,300 \div 100 = \underline{663}$ |
| 4) $7,000 \div 1,000 = \underline{7}$ | 14) $26,186 \div 10 = \underline{2,618.6}$ |
| 5) $1,968 \div 10 = \underline{196.8}$ | 15) $77,100 \div 100 = \underline{771}$ |
| 6) $4,473 \div 10 = \underline{447.3}$ | 16) $97,687 \div 10 = \underline{9,768.7}$ |
| 7) $6,000 \div 100 = \underline{60}$ | 17) $15,572 \div 10 = \underline{1,557.2}$ |
| 8) $40,000 \div 10 = \underline{4,000}$ | 18) $70,000 \div 100 = \underline{700}$ |
| 9) $2,000 \div 1,000 = \underline{2}$ | 19) $48,000 \div 10 = \underline{4,800}$ |
| 10) $4,651 \div 10 = \underline{465.1}$ | 20) $72,687 \div 10 = \underline{7,268.7}$ |

Multiplication revision

- | | |
|------------------------------------|-----------------------------------|
| 21) $5 \times 4 = \underline{20}$ | 25) $4 \times 6 = \underline{24}$ |
| 22) $10 \times 8 = \underline{80}$ | 26) $6 \times 2 = \underline{12}$ |
| 23) $7 \times 5 = \underline{35}$ | 27) $7 \times 7 = \underline{49}$ |
| 24) $6 \times 5 = \underline{30}$ | 28) $5 \times 2 = \underline{10}$ |

Division revision

- | | |
|----------------------------------|---------------------------------|
| 29) $21 \div 3 = \underline{7}$ | 33) $24 \div 6 = \underline{4}$ |
| 30) $90 \div 9 = \underline{10}$ | 34) $30 \div 5 = \underline{6}$ |
| 31) $30 \div 3 = \underline{10}$ | 35) $10 \div 2 = \underline{5}$ |
| 32) $15 \div 3 = \underline{5}$ | 36) $18 \div 2 = \underline{9}$ |



x 10,100,1000

Doubling Lg

Nice Numbers

- Nr 100

x 50,25

+10,100,1000

Halving Lg

+ Nr 100

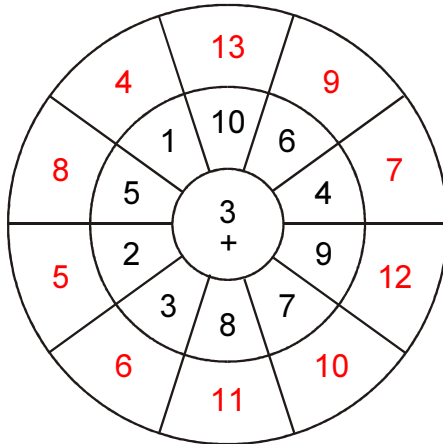
x5

Revision

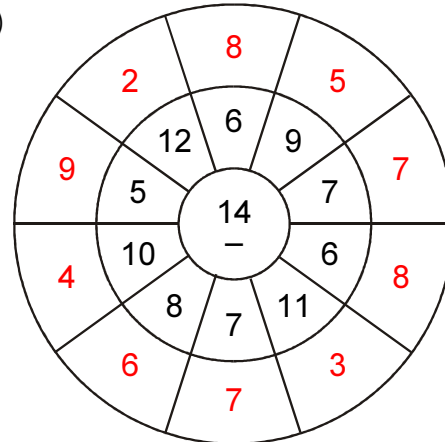
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

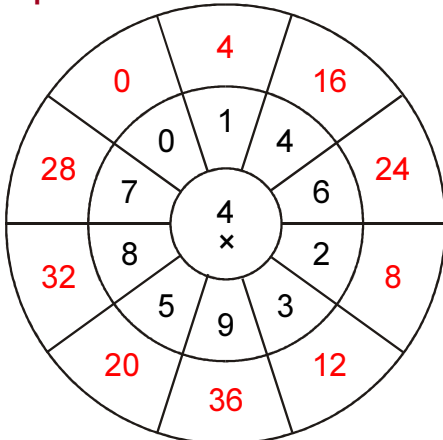
1)

**Subtraction**

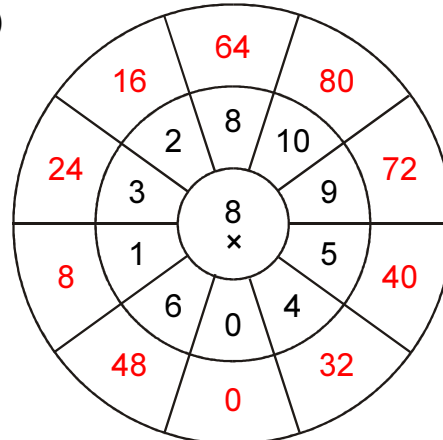
2)

**Multiplication**

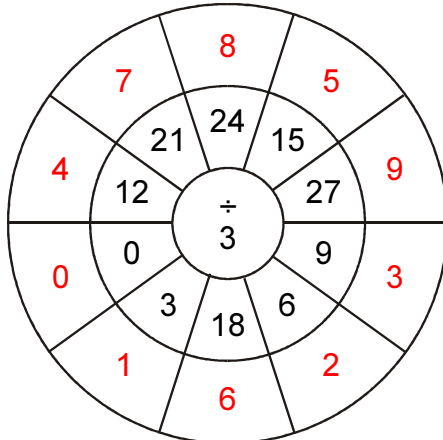
3)



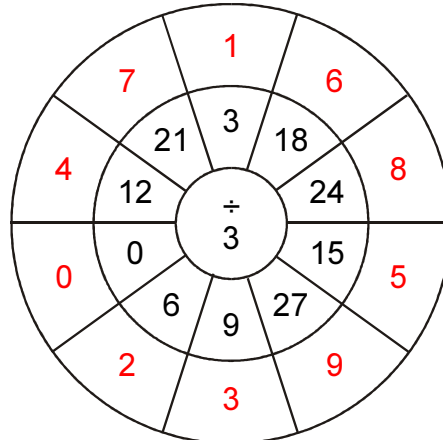
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10, 100, 1000
÷ 10, 100, 1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

– Nr 100

x5

x 50, 25

Revision

Information for Parents: Doubling 2-digit Numbers

Doubling 2-digit numbers

Double both places, starting with the tens.

For example, Double 23: double the 2 (tens), double the 3: 4 tens + 6 = 46.

Doubling without regrouping

- | | | | |
|-----------------------|------------------------|------------------------|------------------------|
| 1) $10 \times 2 = 20$ | 6) $21 \times 2 = 42$ | 11) $41 \times 2 = 82$ | 16) $1 \times 2 = 2$ |
| 2) $32 \times 2 = 64$ | 7) $34 \times 2 = 68$ | 12) $43 \times 2 = 86$ | 17) $23 \times 2 = 46$ |
| 3) $11 \times 2 = 22$ | 8) $23 \times 2 = 46$ | 13) $22 \times 2 = 44$ | 18) $12 \times 2 = 24$ |
| 4) $34 \times 2 = 68$ | 9) $44 \times 2 = 88$ | 14) $24 \times 2 = 48$ | 19) $41 \times 2 = 82$ |
| 5) $13 \times 2 = 26$ | 10) $40 \times 2 = 80$ | 15) $11 \times 2 = 22$ | 20) $30 \times 2 = 60$ |

Doubling 2-digit numbers with regrouping

Start by doubling the tens. For example, Double 46: double 4 = 8. Try to remember this number. If you need to, you can write the 8 very lightly until you have doubled the ones."

Now double the ones: double 6 = 12. Add the ten to the 8 tens, write "9" (if you wrote "8" softly, write over it with "9"). Then record the remaining ones, "2". Double 46 = 92.

Doubling with regrouping

- | | | | |
|------------------------|------------------------|------------------------|------------------------|
| 21) $17 \times 2 = 34$ | 26) $24 \times 2 = 48$ | 31) $24 \times 2 = 48$ | 36) $29 \times 2 = 58$ |
| 22) $39 \times 2 = 78$ | 27) $38 \times 2 = 76$ | 32) $45 \times 2 = 90$ | 37) $47 \times 2 = 94$ |
| 23) $26 \times 2 = 52$ | 28) $18 \times 2 = 36$ | 33) $27 \times 2 = 54$ | 38) $37 \times 2 = 74$ |
| 24) $21 \times 2 = 42$ | 29) $14 \times 2 = 28$ | 34) $42 \times 2 = 84$ | 39) $46 \times 2 = 92$ |
| 25) $27 \times 2 = 54$ | 30) $28 \times 2 = 56$ | 35) $46 \times 2 = 92$ | 40) $43 \times 2 = 86$ |

x10, x100 or x1000, including decimals

- | | |
|----------------------------------|----------------------------------|
| 41) $6.3 \times 1,000 = 6,300.0$ | 46) $64.0 \times 10 = 640.0$ |
| 42) $39.5 \times 10 = 395.0$ | 47) $126 \times 1,000 = 126,000$ |
| 43) $102 \times 10 = 1,020$ | 48) $46.1 \times 100 = 4,610.0$ |
| 44) $949 \times 100 = 94,900$ | 49) $878 \times 1,000 = 878,000$ |
| 45) $497 \times 100 = 49,700$ | 50) $7.2 \times 10 = 72.0$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes Day 3: Mental Strategies Worksheets".



x 10,100,1000
+10,100,1000

Doubling Lg

Halving Lg

Nice Numbers

+ Nr 100

- Nr 100

x5

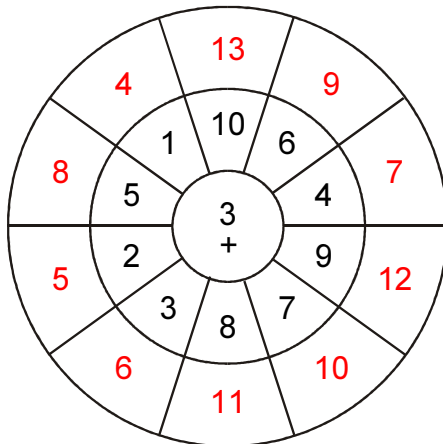
x 50,25

Revision

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

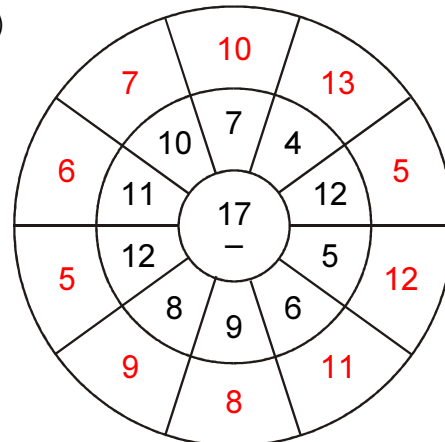
Addition

1)



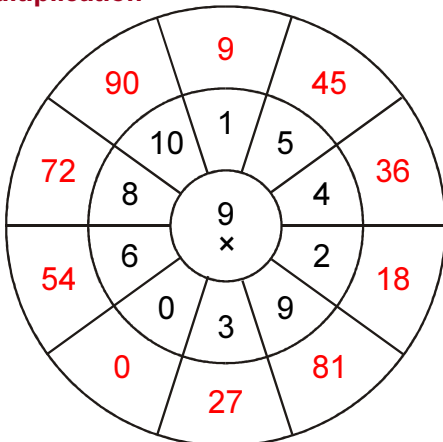
Subtraction

2)

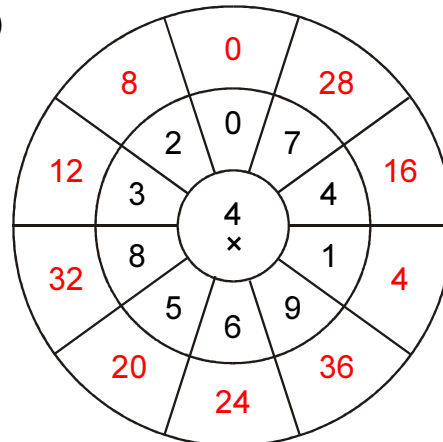


Multiplication

3)

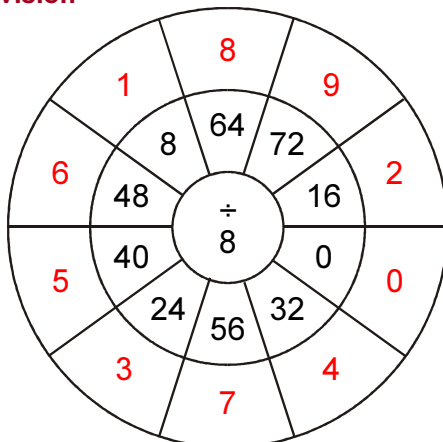


4)

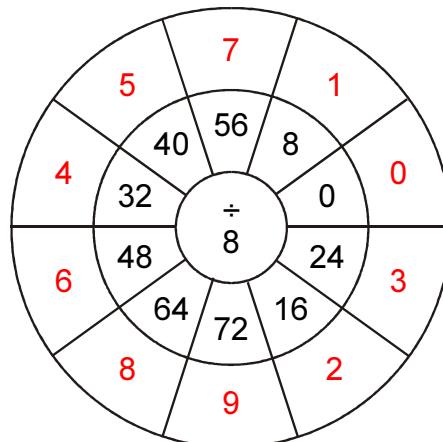


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Homework

Halving 2-digit Numbers: 4 [A]



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷ 10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Information for Parents: Halving 2-digit Numbers

Halving 2-digit numbers

Being able to halve a number is often useful, for example when simplifying common fractions, Sharing money etc.

Halving 2-digit numbers without regrouping

Halve the tens, then halve the ones.

For example, halve 48: Half 4 (tens) + half 8 (ones) = 2 tens + 4 ones = 24.

Halve these numbers

- | | | | |
|---------------------|----------------------|----------------------|----------------------|
| 1) $20 \div 2 = 10$ | 2) $23 \div 2 = 11$ | 11) $40 \div 2 = 20$ | 12) $24 \div 2 = 12$ |
| 3) $44 \div 2 = 22$ | 4) $24 \div 2 = 12$ | 13) $30 \div 2 = 15$ | 14) $41 \div 2 = 20$ |
| 5) $42 \div 2 = 21$ | 6) $30 \div 2 = 15$ | 15) $34 \div 2 = 17$ | 16) $42 \div 2 = 21$ |
| 7) $10 \div 2 = 5$ | 8) $12 \div 2 = 6$ | 17) $22 \div 2 = 11$ | 18) $13 \div 2 = 6$ |
| 9) $22 \div 2 = 11$ | 10) $32 \div 2 = 16$ | 19) $32 \div 2 = 16$ | 20) $20 \div 2 = 10$ |

Halving 2-digit numbers with regrouping

Start with the tens, then the ones. If there is an odd number of tens, take half of the number one less, then add ten to the ones for halving. For example, halve 74: half 6 (tens) + half 14 (ones) = 3 tens + 7 ones = 37.

Halve these numbers

- | | | | |
|----------------------|----------------------|----------------------|----------------------|
| 21) $46 \div 2 = 23$ | 22) $66 \div 2 = 33$ | 31) $52 \div 2 = 26$ | 32) $14 \div 2 = 7$ |
| 23) $72 \div 2 = 36$ | 24) $84 \div 2 = 42$ | 33) $72 \div 2 = 36$ | 34) $76 \div 2 = 38$ |
| 25) $36 \div 2 = 18$ | 26) $32 \div 2 = 16$ | 35) $54 \div 2 = 27$ | 36) $58 \div 2 = 29$ |
| 27) $52 \div 2 = 26$ | 28) $20 \div 2 = 10$ | 37) $46 \div 2 = 23$ | 38) $28 \div 2 = 14$ |
| 29) $14 \div 2 = 7$ | 30) $62 \div 2 = 31$ | 39) $56 \div 2 = 28$ | 40) $62 \div 2 = 31$ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 41) $444 \times 2 = 888$ | 45) $380 \times 2 = 760$ | 49) $714 \times 2 = 1,428$ |
| 42) $281 \times 2 = 562$ | 46) $218 \times 2 = 436$ | 50) $749 \times 2 = 1,498$ |
| 43) $534 \times 2 = 1,068$ | 47) $721 \times 2 = 1,442$ | 51) $476 \times 2 = 952$ |
| 44) $737 \times 2 = 1,474$ | 48) $299 \times 2 = 598$ | 52) $752 \times 2 = 1,504$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

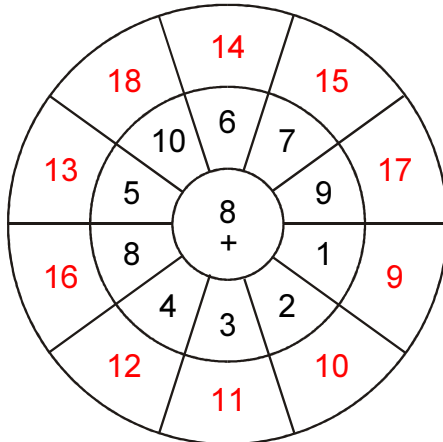


x 10,100,1000	Doubling Lg	Nice Numbers	- Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

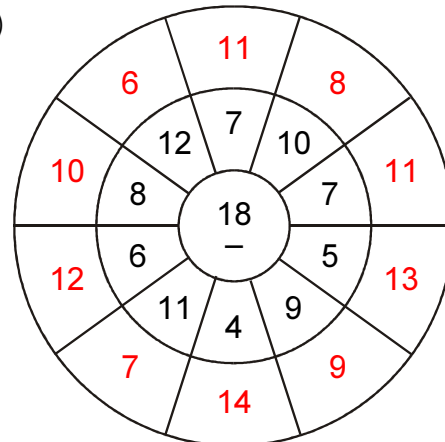
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

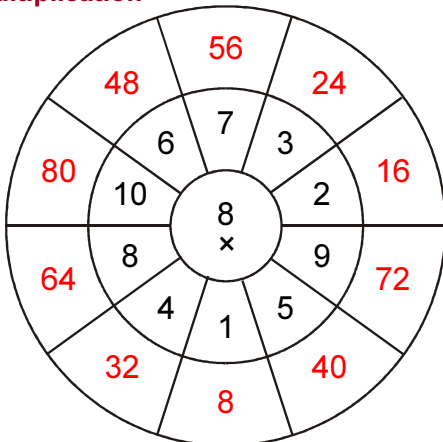
1)

**Subtraction**

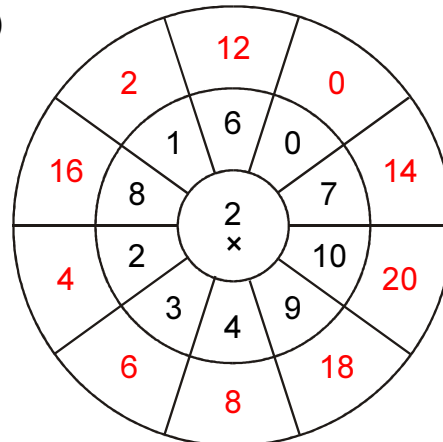
2)

**Multiplication**

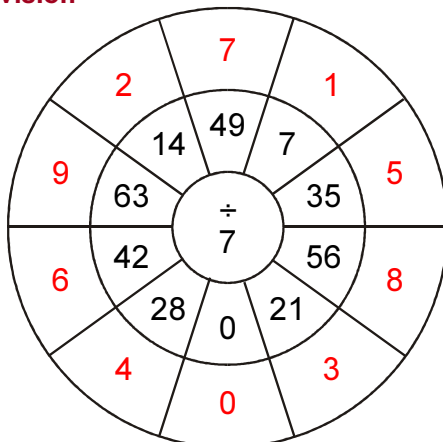
3)



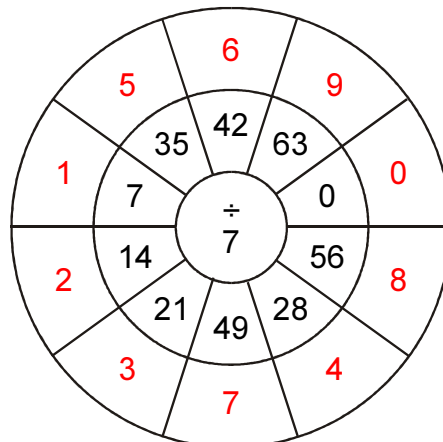
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Information for Parents: Adding "Nice" Numbers

Adding pairs of "nice" numbers:

When mentally adding a set of numbers, proficient thinkers will look for numbers which add easily together. These pairs will usually be two numbers whose sum is 10 or 100.

Cross off the numbers as they are added so as not to get confused.

For example: $\cancel{7} + 6 + \cancel{8} + \cancel{2} + \cancel{3} = 20 + 6 = 26$

Add the "nice" numbers to find the sum (cross them off as you add them).

- | | |
|---|---|
| 1) $3 + 7 + 5 + 1 + 9 = \underline{25}$ | 2) $1 + 8 + 9 + 2 + 9 = \underline{29}$ |
| 3) $2 + 8 + 7 + 3 + 7 = \underline{27}$ | 4) $5 + 1 + 5 + 1 + 9 = \underline{21}$ |
| 5) $5 + 1 + 8 + 5 + 2 = \underline{21}$ | 6) $7 + 3 + 8 + 2 + 8 = \underline{28}$ |
| 7) $30 + 70 + 50 + 40 + 10 = \underline{200}$ | 8) $60 + 90 + 40 + 10 + 30 = \underline{230}$ |
| 9) $80 + 10 + 90 + 40 + 20 = \underline{240}$ | 10) $6 + 2 + 9 + 8 + 4 = \underline{29}$ |

Halve these numbers

- | | | |
|------------------------------------|------------------------------------|------------------------------------|
| 11) $818 \div 2 = \underline{409}$ | 12) $122 \div 2 = \underline{61}$ | 13) $902 \div 2 = \underline{451}$ |
| 14) $136 \div 2 = \underline{68}$ | 15) $82 \div 2 = \underline{41}$ | 16) $348 \div 2 = \underline{174}$ |
| 17) $502 \div 2 = \underline{251}$ | 18) $760 \div 2 = \underline{380}$ | 19) $368 \div 2 = \underline{184}$ |
| 20) $668 \div 2 = \underline{334}$ | 21) $202 \div 2 = \underline{101}$ | 22) $196 \div 2 = \underline{98}$ |
| 23) $644 \div 2 = \underline{322}$ | 24) $920 \div 2 = \underline{460}$ | 25) $496 \div 2 = \underline{248}$ |

Double these numbers

- | | | |
|--|--|--|
| 26) $355 \times 2 = \underline{710}$ | 31) $600 \times 2 = \underline{1,200}$ | 36) $725 \times 2 = \underline{1,450}$ |
| 27) $907 \times 2 = \underline{1,814}$ | 32) $401 \times 2 = \underline{802}$ | 37) $148 \times 2 = \underline{296}$ |
| 28) $382 \times 2 = \underline{764}$ | 33) $663 \times 2 = \underline{1,326}$ | 38) $205 \times 2 = \underline{410}$ |
| 29) $852 \times 2 = \underline{1,704}$ | 34) $312 \times 2 = \underline{624}$ | 39) $550 \times 2 = \underline{1,100}$ |
| 30) $476 \times 2 = \underline{952}$ | 35) $840 \times 2 = \underline{1,680}$ | 40) $891 \times 2 = \underline{1,782}$ |



x 10,100,1000
÷10,100,1000

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

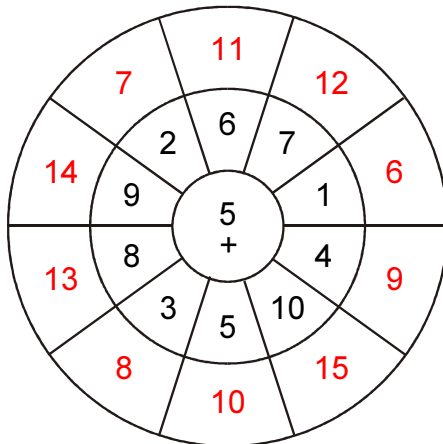
- Nr 100

x 50,25
Revision

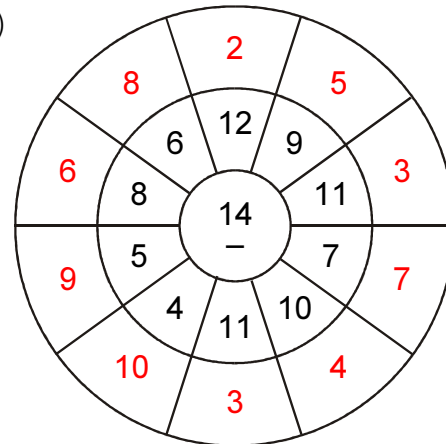
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

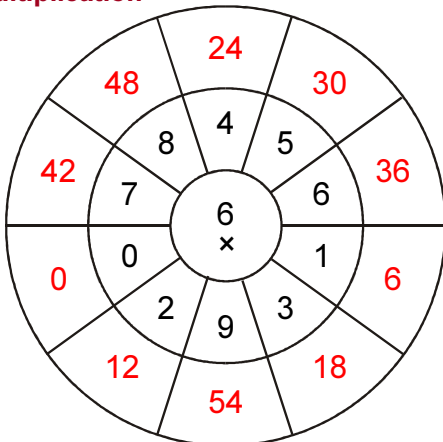
1)

**Subtraction**

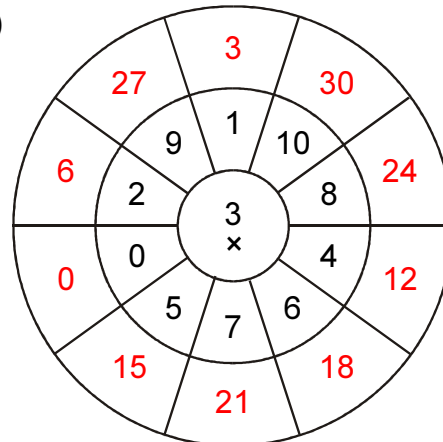
2)

**Multiplication**

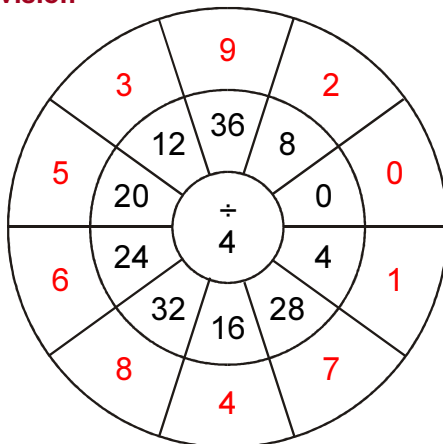
3)



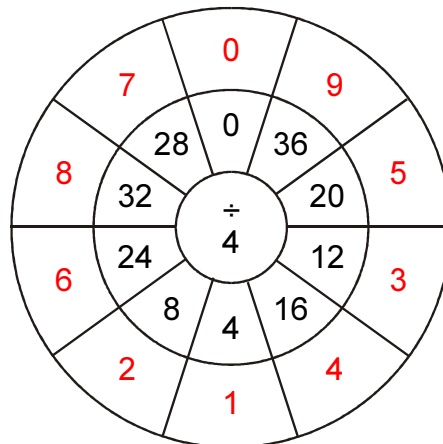
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



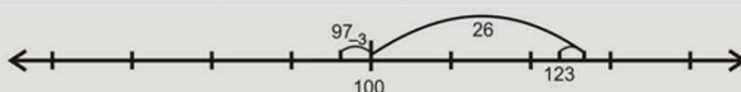
x 10,100,1000	Doubling Lg	Nice Numbers	– Nr 100	x 50,25
÷10,100,1000	Halving Lg	+ Nr 100	x5	Revision

Information for Parents: Adding Near 100 Numbers

Adding near 100:

When adding near 100 numbers, a “compensation” method can often be used.

For example: $97 + 26 = (100 + 26) - 3 = (126 - 3) = 123$



As 97 is 3 less than 100, add 100 then take 3 off the answer.

Addition near 100

- | | | |
|--------------------|---------------------|---------------------|
| 1) $97 + 39 = 136$ | 6) $93 + 25 = 118$ | 11) $95 + 35 = 130$ |
| 2) $96 + 42 = 138$ | 7) $95 + 12 = 107$ | 12) $94 + 39 = 133$ |
| 3) $97 + 21 = 118$ | 8) $98 + 26 = 124$ | 13) $99 + 31 = 130$ |
| 4) $97 + 11 = 108$ | 9) $99 + 40 = 139$ | 14) $95 + 32 = 127$ |
| 5) $97 + 26 = 123$ | 10) $96 + 39 = 135$ | 15) $98 + 17 = 115$ |

Halve these numbers

- | | | |
|------------------------|------------------------|------------------------|
| 16) $176 \div 2 = 88$ | 17) $624 \div 2 = 312$ | 18) $790 \div 2 = 395$ |
| 19) $986 \div 2 = 493$ | 20) $556 \div 2 = 278$ | 21) $22 \div 2 = 11$ |
| 22) $494 \div 2 = 247$ | 23) $440 \div 2 = 220$ | 24) $910 \div 2 = 455$ |
| 25) $804 \div 2 = 402$ | 26) $870 \div 2 = 435$ | 27) $318 \div 2 = 159$ |
| 28) $704 \div 2 = 352$ | 29) $452 \div 2 = 226$ | 30) $100 \div 2 = 50$ |

Double these numbers

- | | | |
|----------------------------|----------------------------|----------------------------|
| 31) $121 \times 2 = 242$ | 35) $651 \times 2 = 1,302$ | 39) $626 \times 2 = 1,252$ |
| 32) $760 \times 2 = 1,520$ | 36) $353 \times 2 = 706$ | 40) $811 \times 2 = 1,622$ |
| 33) $874 \times 2 = 1,748$ | 37) $876 \times 2 = 1,752$ | 41) $444 \times 2 = 888$ |
| 34) $633 \times 2 = 1,266$ | 38) $176 \times 2 = 352$ | 42) $580 \times 2 = 1,160$ |



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
 $\div 2, 5, 10$

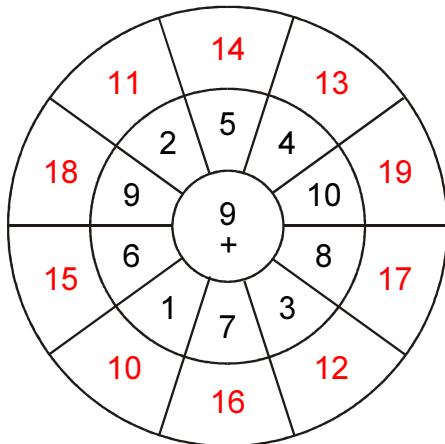
$- \text{Nr } 100$
 $+ \text{Nr } 100$

$\times 50, 25$
Revision

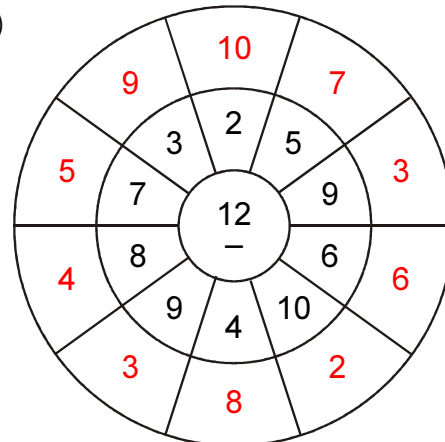
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

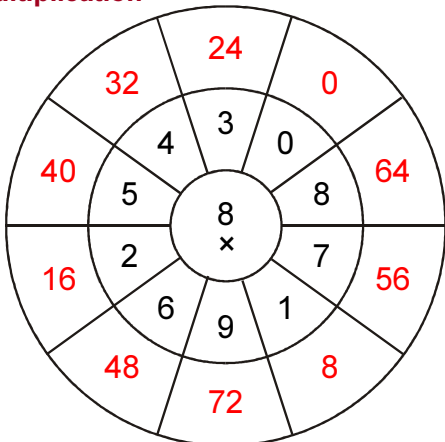
1)

**Subtraction**

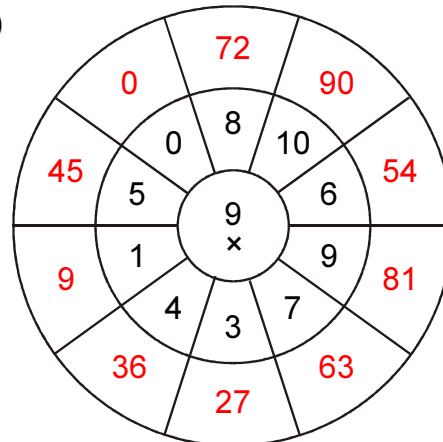
2)

**Multiplication**

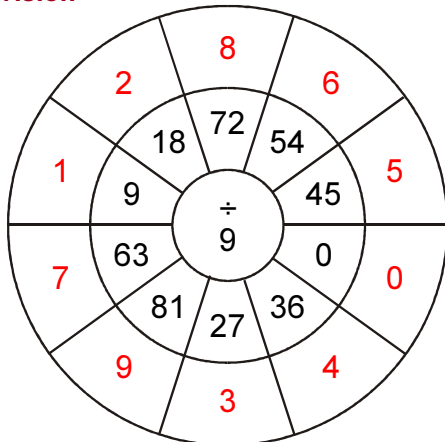
3)



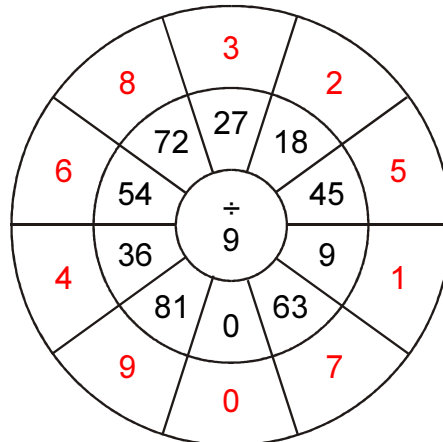
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000
÷ 10,100,1000

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

– Nr 100
x5

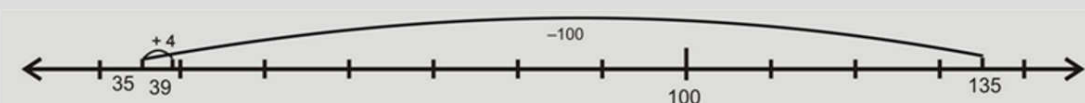
x 50,25
Revision

Information for Parents: Subtracting Near 100 Numbers

Subtracting near 100:

When subtracting a number just less than 100, we can first take away 100, then compensate by adding the difference.

For example: $135 - 96 = (135 - 100) + 4 = 35 + 4 = 39$



Subtraction near 100

- | | | |
|--------------------------------|---------------------------------|---------------------------------|
| 1) $138 - 99 = \underline{39}$ | 6) $135 - 97 = \underline{38}$ | 11) $143 - 92 = \underline{51}$ |
| 2) $120 - 98 = \underline{22}$ | 7) $127 - 95 = \underline{32}$ | 12) $109 - 95 = \underline{14}$ |
| 3) $127 - 96 = \underline{31}$ | 8) $135 - 96 = \underline{39}$ | 13) $137 - 97 = \underline{40}$ |
| 4) $115 - 97 = \underline{18}$ | 9) $116 - 92 = \underline{24}$ | 14) $118 - 98 = \underline{20}$ |
| 5) $138 - 94 = \underline{44}$ | 10) $132 - 96 = \underline{36}$ | 15) $125 - 91 = \underline{34}$ |

Addition near 100

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| 16) $196 + 41 = \underline{237}$ | 21) $105 + 34 = \underline{139}$ | 26) $96 + 25 = \underline{121}$ |
| 17) $103 + 36 = \underline{139}$ | 22) $591 + 13 = \underline{604}$ | 27) $95 + 23 = \underline{118}$ |
| 18) $299 + 41 = \underline{340}$ | 23) $198 + 24 = \underline{222}$ | 28) $107 + 10 = \underline{117}$ |
| 19) $404 + 14 = \underline{418}$ | 24) $94 + 12 = \underline{106}$ | 29) $206 + 36 = \underline{242}$ |
| 20) $100 + 24 = \underline{124}$ | 25) $306 + 26 = \underline{332}$ | 30) $91 + 20 = \underline{111}$ |

Double these numbers

- | | | |
|--------------------------------------|--|--|
| 31) $329 \times 2 = \underline{658}$ | 34) $208 \times 2 = \underline{416}$ | 37) $622 \times 2 = \underline{1,244}$ |
| 32) $325 \times 2 = \underline{650}$ | 35) $744 \times 2 = \underline{1,488}$ | 38) $842 \times 2 = \underline{1,684}$ |
| 33) $493 \times 2 = \underline{986}$ | 36) $330 \times 2 = \underline{660}$ | 39) $226 \times 2 = \underline{452}$ |

Multiplication

- | | |
|-----------------------------------|------------------------------------|
| 40) $9 \times 6 = \underline{54}$ | 43) $8 \times 5 = \underline{40}$ |
| 41) $7 \times 5 = \underline{35}$ | 44) $10 \times 9 = \underline{90}$ |
| 42) $7 \times 7 = \underline{49}$ | 45) $5 \times 5 = \underline{25}$ |

Division

- | | |
|---------------------------------|----------------------------------|
| 46) $64 \div 8 = \underline{8}$ | 49) $45 \div 5 = \underline{9}$ |
| 47) $54 \div 6 = \underline{9}$ | 50) $72 \div 8 = \underline{9}$ |
| 48) $36 \div 6 = \underline{6}$ | 51) $60 \div 6 = \underline{10}$ |



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
 $+ \text{Nr } 100$

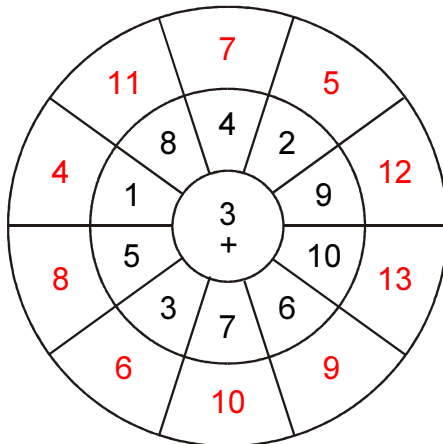
$- \text{Nr } 100$
 $\times 5$

$\times 50, 25$
Revision

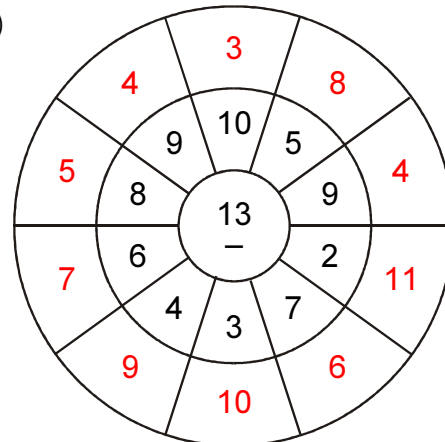
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

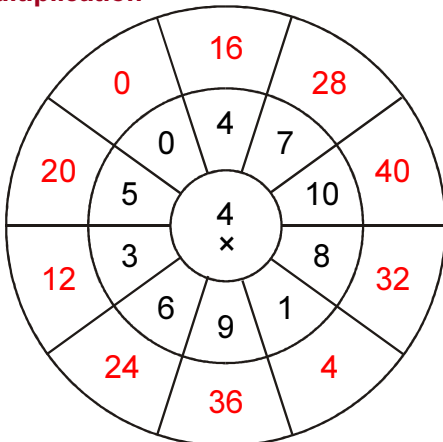
1)

**Subtraction**

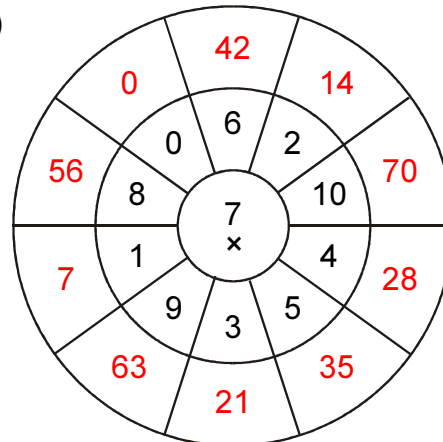
2)

**Multiplication**

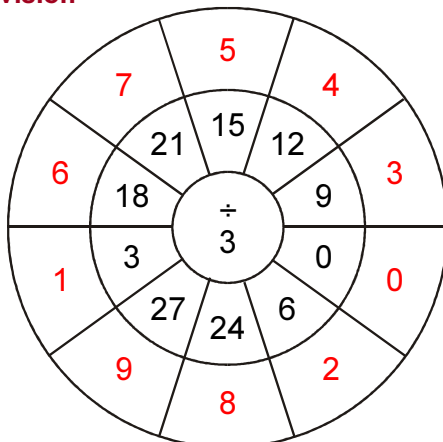
3)



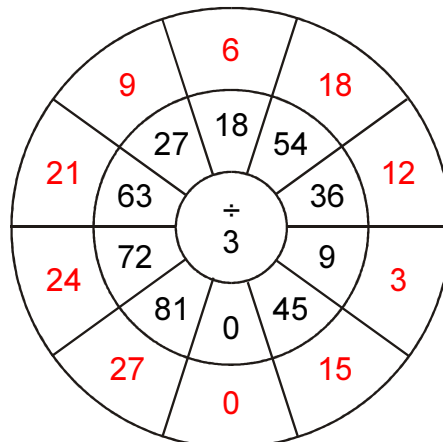
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Homework

Multiplying 2- & 3-digit numbers by 5: 8 [A]



x 10,100,1000
÷10,100,1000

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

– Nr 100

x 50,25

x5

Revision

Information for Parents: Multiplying 2-digit numbers by 5

Multiplying 2-digit numbers by 5

We can use the same strategy we used for the x5 number facts: multiply the number by 10 first, then halve it.
For example, 37×5 : $37 \times 10 = 370$. Half of 370 = 185 $38 \times 5 = 185$

2 digit numbers x 5

- | | | | |
|-------------------------|-------------------------|-------------------------|-------------------------|
| 1) $42 \times 10 = 420$ | 6) $67 \times 5 = 335$ | 11) $49 \times 5 = 245$ | 16) $94 \times 5 = 470$ |
| 2) $42 \times 5 = 210$ | 7) $74 \times 5 = 370$ | 12) $84 \times 5 = 420$ | 17) $88 \times 5 = 440$ |
| 3) $85 \times 10 = 850$ | 8) $90 \times 5 = 450$ | 13) $56 \times 5 = 280$ | 18) $36 \times 5 = 180$ |
| 4) $85 \times 5 = 425$ | 9) $88 \times 5 = 440$ | 14) $62 \times 5 = 310$ | 19) $58 \times 5 = 290$ |
| 5) $68 \times 5 = 340$ | 10) $64 \times 5 = 320$ | 15) $98 \times 5 = 490$ | 20) $29 \times 5 = 145$ |

3 digit numbers x 5

- | | | |
|-----------------------------|----------------------------|----------------------------|
| 21) $450 \times 10 = 4,500$ | 25) $520 \times 5 = 2,600$ | 29) $968 \times 5 = 4,840$ |
| 22) $450 \times 5 = 2,250$ | 26) $412 \times 5 = 2,060$ | 30) $130 \times 5 = 650$ |
| 23) $262 \times 10 = 2,620$ | 27) $818 \times 5 = 4,090$ | 31) $886 \times 5 = 4,430$ |
| 24) $262 \times 5 = 1,310$ | 28) $644 \times 5 = 3,220$ | 32) $844 \times 5 = 4,220$ |

Subtraction near 100

- | | | |
|----------------------|----------------------|-----------------------|
| 33) $126 - 108 = 18$ | 38) $144 - 107 = 37$ | 43) $126 - 106 = 20$ |
| 34) $122 - 105 = 17$ | 39) $211 - 98 = 113$ | 44) $113 - 96 = 17$ |
| 35) $138 - 104 = 34$ | 40) $129 - 99 = 30$ | 45) $514 - 100 = 414$ |
| 36) $112 - 93 = 19$ | 41) $344 - 92 = 252$ | 46) $140 - 100 = 40$ |
| 37) $134 - 106 = 28$ | 42) $137 - 94 = 43$ | 47) $127 - 98 = 29$ |

Multiplication

- | | |
|------------------------|------------------------|
| 48) $5 \times 5 = 25$ | 52) $10 \times 6 = 60$ |
| 49) $9 \times 8 = 72$ | 53) $10 \times 7 = 70$ |
| 50) $10 \times 5 = 50$ | 54) $9 \times 5 = 45$ |
| 51) $9 \times 9 = 81$ | 55) $6 \times 7 = 42$ |

Division

- | | |
|----------------------|----------------------|
| 56) $64 \div 8 = 8$ | 60) $35 \div 5 = 7$ |
| 57) $50 \div 5 = 10$ | 61) $60 \div 6 = 10$ |
| 58) $40 \div 8 = 5$ | 62) $49 \div 7 = 7$ |
| 59) $80 \div 8 = 10$ | 63) $25 \div 5 = 5$ |

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

– Nr 100

$\times 50, 25$

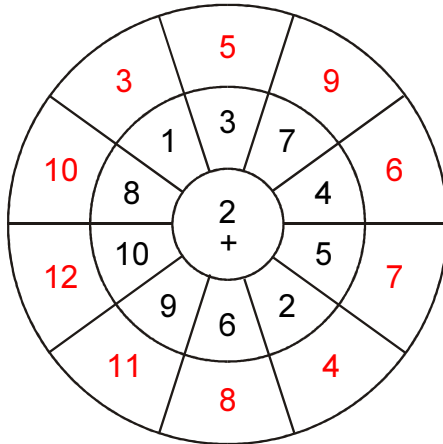
$\times 5$

Revision

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

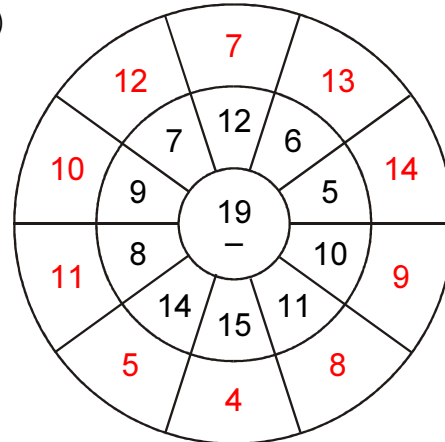
Addition

1)



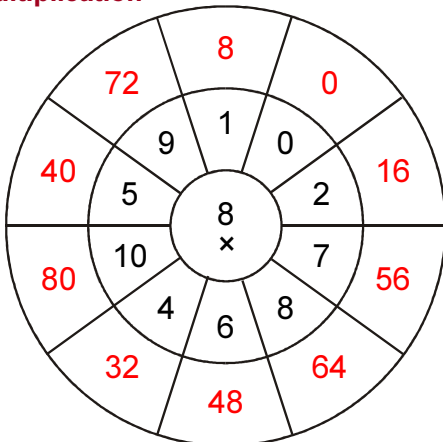
Subtraction

2)

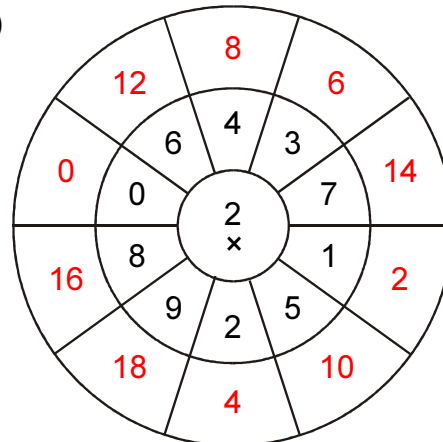


Multiplication

3)

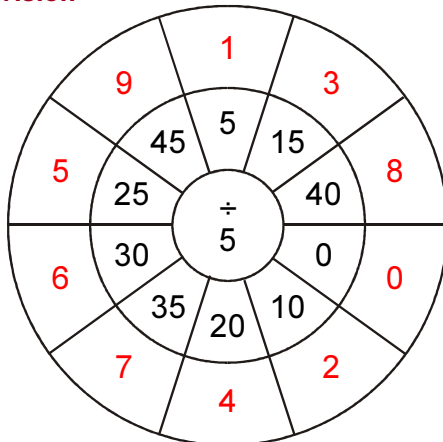


4)

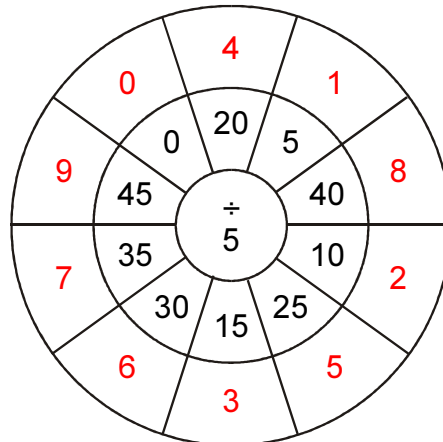


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000
÷ 10,100,1000

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

– Nr 100

x 50,25
x5
Revision

Information for Parents: Multiply Large Numbers x 50

Multiplying 2-digit numbers x 50

Multiplying by 50 is quite easy to do, seeing that it is one half of 100.

Multiplying by 50 can be done by multiplying by 100 then halving the result, or in the opposite order, halve the other number first, then multiply by 100.

For example, $62 \times 50 = (62 \times 100) \div 2 = 6200 \div 2 = 3100$

or: $62 \times 50 = (62 \div 2) \times 100 = 31 \times 100 = 3100$

2 digit numbers x 50

- | | | |
|--|--|--|
| 1) $42 \times 100 = \underline{4,200}$ | 6) $32 \times 50 = \underline{1,600}$ | 11) $35 \times 50 = \underline{1,750}$ |
| 2) $42 \times 50 = \underline{2,100}$ | 7) $93 \times 50 = \underline{4,650}$ | 12) $43 \times 50 = \underline{2,150}$ |
| 3) $82 \times 100 = \underline{8,200}$ | 8) $86 \times 50 = \underline{4,300}$ | 13) $68 \times 50 = \underline{3,400}$ |
| 4) $82 \times 50 = \underline{4,100}$ | 9) $27 \times 50 = \underline{1,350}$ | 14) $88 \times 50 = \underline{4,400}$ |
| 5) $84 \times 50 = \underline{4,200}$ | 10) $23 \times 50 = \underline{1,150}$ | 15) $76 \times 50 = \underline{3,800}$ |

Double these numbers

- | | | |
|--|--|--------------------------------------|
| 16) $793 \times 2 = \underline{1,586}$ | 20) $136 \times 2 = \underline{272}$ | 24) $203 \times 2 = \underline{406}$ |
| 17) $702 \times 2 = \underline{1,404}$ | 21) $672 \times 2 = \underline{1,344}$ | 25) $407 \times 2 = \underline{814}$ |
| 18) $785 \times 2 = \underline{1,570}$ | 22) $401 \times 2 = \underline{802}$ | 26) $307 \times 2 = \underline{614}$ |
| 19) $110 \times 2 = \underline{220}$ | 23) $595 \times 2 = \underline{1,190}$ | 27) $238 \times 2 = \underline{476}$ |

Addition revision

- | | |
|-------------------------------|------------------------------|
| 28) $5 + 6 = \underline{11}$ | 33) $3 + 4 = \underline{7}$ |
| 29) $5 + 7 = \underline{12}$ | 34) $6 + 7 = \underline{13}$ |
| 30) $9 + 9 = \underline{18}$ | 35) $9 + 5 = \underline{14}$ |
| 31) $9 + 8 = \underline{17}$ | 36) $8 + 6 = \underline{14}$ |
| 32) $10 + 4 = \underline{14}$ | 37) $3 + 9 = \underline{12}$ |

Subtraction revision

- | | |
|------------------------------|------------------------------|
| 38) $11 - 4 = \underline{7}$ | 43) $13 - 7 = \underline{6}$ |
| 39) $16 - 9 = \underline{7}$ | 44) $12 - 5 = \underline{7}$ |
| 40) $16 - 8 = \underline{8}$ | 45) $17 - 8 = \underline{9}$ |
| 41) $14 - 9 = \underline{5}$ | 46) $11 - 5 = \underline{6}$ |
| 42) $13 - 8 = \underline{5}$ | 47) $12 - 4 = \underline{8}$ |

Multiplication

- | | |
|------------------------------------|------------------------------------|
| 48) $9 \times 6 = \underline{54}$ | 51) $6 \times 7 = \underline{42}$ |
| 49) $9 \times 9 = \underline{81}$ | 52) $10 \times 5 = \underline{50}$ |
| 50) $10 \times 6 = \underline{60}$ | 53) $5 \times 8 = \underline{40}$ |

Division

- | | |
|----------------------------------|----------------------------------|
| 54) $80 \div 8 = \underline{10}$ | 57) $90 \div 9 = \underline{10}$ |
| 55) $45 \div 9 = \underline{5}$ | 58) $70 \div 7 = \underline{10}$ |
| 56) $72 \div 8 = \underline{9}$ | 59) $30 \div 6 = \underline{5}$ |



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
+ Nr 100

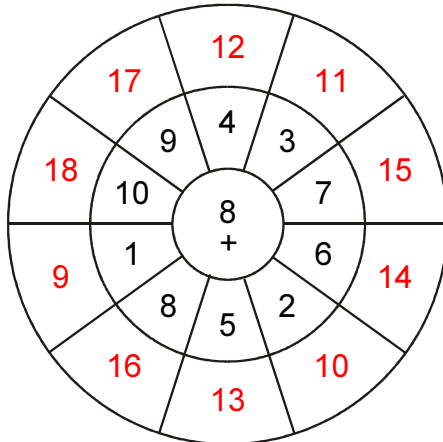
– Nr 100

$\times 50, 25$
Revision

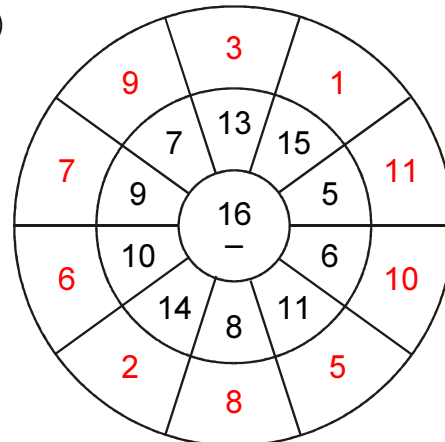
This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

Addition

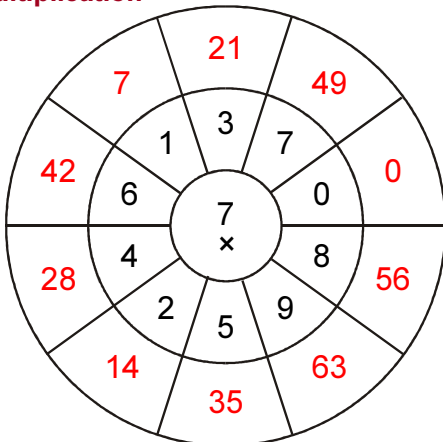
1)

**Subtraction**

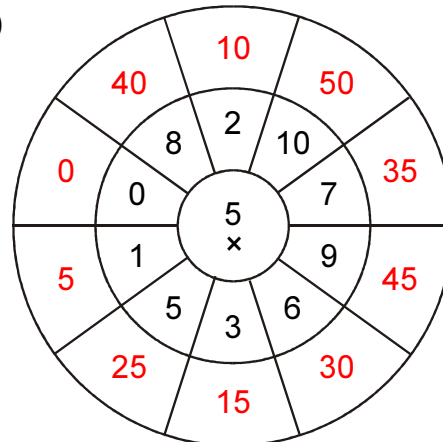
2)

**Multiplication**

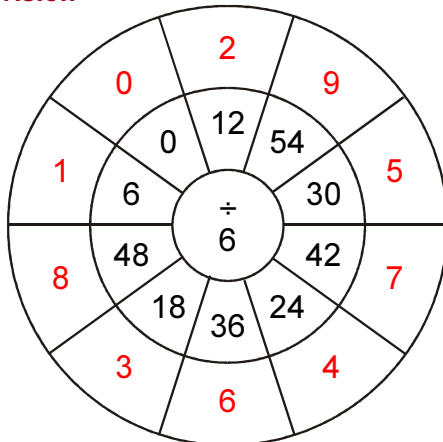
3)



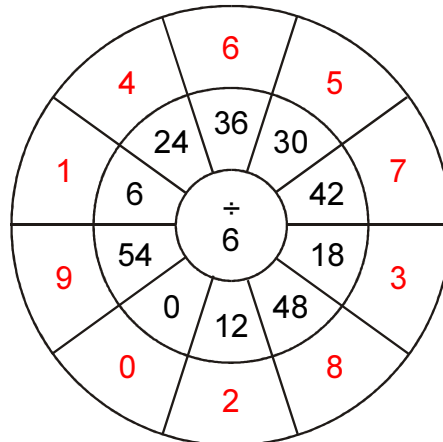
4)

**Division**

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".



x 10,100,1000 ÷10,100,1000	Doubling Lg Halving Lg	Nice Numbers + Nr 100	– Nr 100	x 50,25	Revision
-------------------------------	---------------------------	--------------------------	----------	---------	----------

Multiply these numbers including decimals

- 1) $8.59 \times 100 = \underline{859.00}$ 6) $0.604 \times 100 = \underline{60.400}$
 2) $2.00 \times 1,000 = \underline{2,000.00}$ 7) $0.509 \times 10 = \underline{5.090}$
 3) $660 \times 10 = \underline{6,600}$ 8) $975 \times 1,000 = \underline{975,000}$
 4) $426 \times 1,000 = \underline{426,000}$ 9) $95.8 \times 100 = \underline{9,580.0}$
 5) $0.4 \times 100 = \underline{40.0}$ 10) $325 \times 1,000 = \underline{325,000}$

2 digit numbers x 25

- 11) $50 \times 25 = \underline{1,250}$ 14) $44 \times 25 = \underline{1,100}$ 17) $70 \times 25 = \underline{1,750}$
 12) $82 \times 25 = \underline{2,050}$ 15) $40 \times 25 = \underline{1,000}$ 18) $80 \times 25 = \underline{2,000}$
 13) $96 \times 25 = \underline{2,400}$ 16) $28 \times 25 = \underline{700}$ 19) $64 \times 25 = \underline{1,600}$

2 digit numbers x 50

- 20) $41 \times 50 = \underline{2,050}$ 23) $74 \times 50 = \underline{3,700}$ 26) $49 \times 50 = \underline{2,450}$
 21) $46 \times 50 = \underline{2,300}$ 24) $92 \times 50 = \underline{4,600}$ 27) $33 \times 50 = \underline{1,650}$
 22) $25 \times 50 = \underline{1,250}$ 25) $78 \times 50 = \underline{3,900}$ 28) $76 \times 50 = \underline{3,800}$

Add the nice numbers to find the sum (cross them off as you add them).

- 29) $3 + 7 + 7 + 2 + 8 + 4 = \underline{31}$ 33) $3 + 5 + 6 + 2 + 3 + 6 = \underline{25}$
 30) $3 + 7 + 3 + 4 + 2 + 8 = \underline{27}$ 34) $5 + 2 + 4 + 1 + 1 + 7 = \underline{20}$
 31) $5 + 6 + 3 + 5 + 5 + 9 = \underline{33}$ 35) $4 + 3 + 8 + 4 + 2 + 2 = \underline{23}$
 32) $4 + 6 + 5 + 6 + 9 + 5 = \underline{35}$ 36) $2 + 7 + 6 + 9 + 8 + 3 = \underline{35}$

Addition revision

- 37) $5 + 8 = \underline{13}$ 41) $3 + 4 = \underline{7}$
 38) $4 + 4 = \underline{8}$ 42) $7 + 7 = \underline{14}$
 39) $8 + 4 = \underline{12}$ 43) $10 + 7 = \underline{17}$
 40) $4 + 5 = \underline{9}$ 44) $4 + 9 = \underline{13}$

Subtraction revision

- 45) $18 - 9 = \underline{9}$ 49) $15 - 7 = \underline{8}$
 46) $10 - 5 = \underline{5}$ 50) $14 - 6 = \underline{8}$
 47) $17 - 8 = \underline{9}$ 51) $17 - 9 = \underline{8}$
 48) $8 - 2 = \underline{6}$ 52) $10 - 2 = \underline{8}$



$\times 10, 100, 1000$
 $\div 10, 100, 1000$

Doubling Lg
Halving Lg

Nice Numbers
 $+ \text{Nr } 100$

$- \text{Nr } 100$

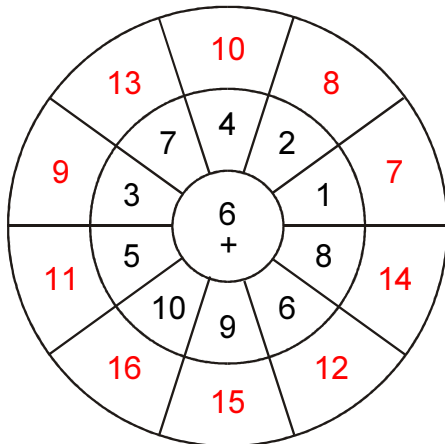
$\times 50, 25$
 $\times 5$

Revision

This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day Level 3: Mental Strategies Worksheets". Completing the wheels help your child remember their numbers facts with daily practice.

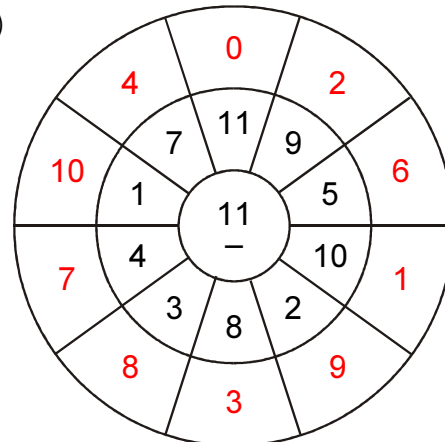
Addition

1)



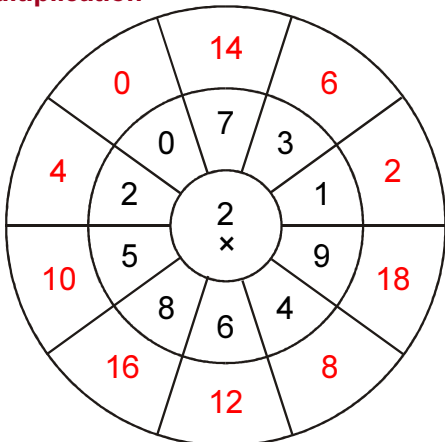
Subtraction

2)

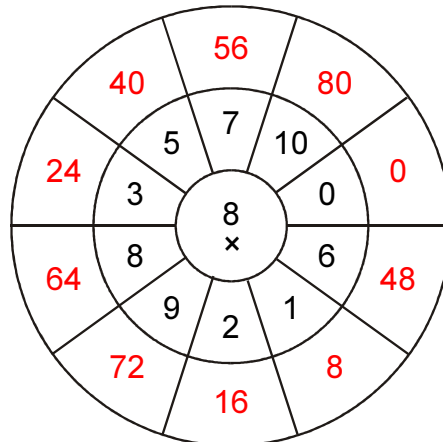


Multiplication

3)

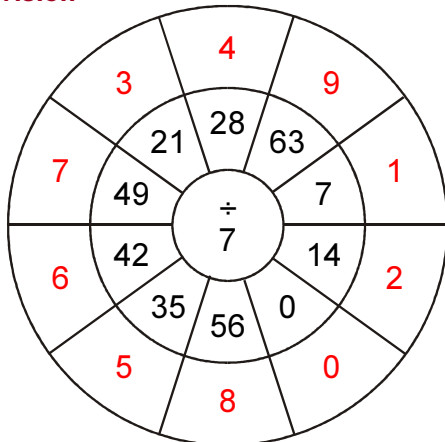


4)

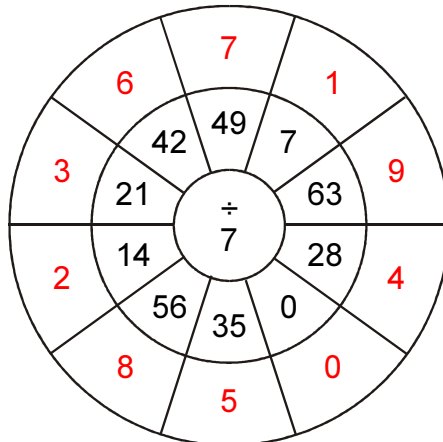


Division

5)



6)



This worksheet is part of the Professor Pete's Classroom eBook "Ten Minutes a Day 3: Mental Strategies Worksheets".

Bring It On! Mental Strategies Worksheets

By Trish Price & Peter Price

Published by Professor Pete's Classroom

www.professorpetesclassroom.com

ISBN: 978-1-922167-14-9

