Written in NZ for NZ

## Help Me at HOME Series



# Number Knowledge Worksheets

A Teacher's resource supplied as PHOTOCOPY MASTERS



## Book 7a

This resource contains





and supports the

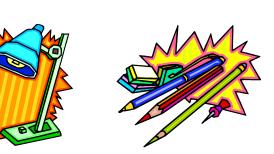
Numeracy Professional Development

Project Stages 6 to 8









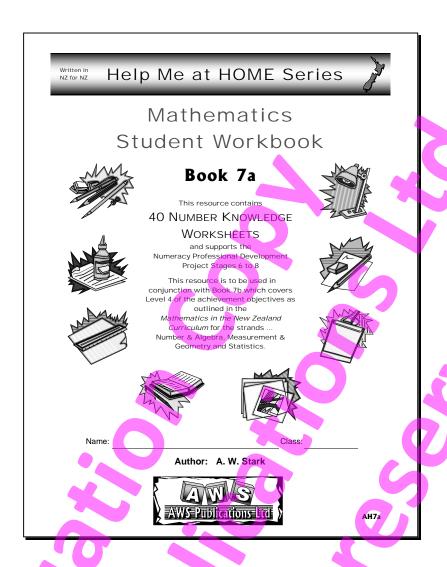
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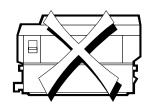


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#### Note from the author:

About this resource ...

#### Help Me at Home Number Knowledge Worksheets

- Book 7a (Code: AH7a)

... is one of a series of **TWO sets** of 8 resources and has been written to support the **Numeracy Professional Development Project** currently being implemented within many New Zealand schools.

Resource Book 7a is to be used in conjunction with a second resource, Book 7b.

### Help Me at Home Curriculum Strand Worksheets

- Book 7b (Code: AH7b)

Book 7b has been written to cover the achievement objectives as outlined in the *Mathematics in the New Zealand Curriculum* (2007 revised edition) document for the teaching areas or strands of ...

Number & Algebra, Measurement & Geometry and Statistics.

#### Background Information:

The Numeracy Professional Development Project being implemented in many schools involves a **knowledge section** and a **strategy section**.

The **knowledge section** introduces and revises the key number knowledge facts required.

The **strategy section** describes the mental processes students employ to estimate answers and solve problems involving the four operations of addition, subtraction, multiplication and division.

The strategy stages are listed in this table.

The aim of this project is to equip students with various strategies that allow them to be successful at Mathematics.

In order for this to occur, it is essential for students to be confident with number knowledge.

	Strategy Stages
0	Emergent
1	One-to-one Counting
2	Counting from One on Materials
3	Counting from One by Imaging
4	Advanced Counting (Counting On)
5	Early Additive Part-Whole
6	Advanced Additive Part-Whole
7	Advanced Multiplicative Part-Whole
8	Advanced Proportional Part-Whole

Without the 'knowledge', that is, knowing the basic numeracy facts, it is difficult for a student to progress through the strategy stages. Students move through the strategy stages at different rates and may be working at different stages given a certain problem. This is often a result of gaps in key knowledge, hence it CANNOT be stressed enough the importance of learning the numeracy facts. How children learn the numeracy facts is not as important as knowing them. These resources are designed to systematically introduce and revise the key numeracy facts.

#### How to use these resources:

There are 2 sets of 8 resources in this series.

The table opposite shows the suggested Year Group each book can be used at, but this is only a suggestion.

Example:

1 - <u>2</u> - 3 means it is likely to be used at Year 2, the bold underlined number.

	Book	Resource Code	Suggested Year Group (underlined)	Strategy Stages covered	Curriculum Level
	1a / 1b	AH1a & AH1b	1 - <u>2</u> - 3	1 to 3	1
	2a / 2b	AH2a & AH2b	2 - <u>3</u> - 4	4	1/2
	3a / 3b	AH3a & AH3b	3 - <u>4</u> - 5	4 & 5	2
	4a / 4b	AH4a & AH4b	4 - <u>5</u> <i>-</i> 6	5 & 6	2/3
	5a / 5b	AH5a & AH5b	5 - <u>6</u> <i>-</i> 7	6 & 7	3
4	6a / 6b	AH6a & AH6b	6 - <u><b>7</b></u> <i>-</i> 8	6 & 7	3 / 4
	7a / 7b	AH7a & AH7b	7 - <u><b>8</b></u> <i>-</i> 9	6 to 8	4
	8a / 8b	AH8a & AH8b	8 - <u><b>9</b></u> - 10	6 to 8	5

#### Why so many resources?

#### A note for Teachers

There are 2 sets of 8 resources in this series to allow you to have a different book available each year for classes which are made up of mixed year groups. This will stop the problem of a student saying "We used this book last year!". Which book you use for your class is up to your professional judgement, taking into account which resource classes above or below your class might use.

#### How to use these TWO resources - Book 7a & Book 7b

## Book AH7a 40x Number Knowledge Worksheets

- This resource systematically introduces and revises the number knowledge, presented in various formats.
- Designed to reinforce the Numeracy Professional Development Project, it is intended that one worksheet per week is completed in order from worksheet 1 to worksheet 40.
- One worksheet per week is to be done in conjunction with one worksheet selected from the Curriculum Strand Worksheet resource (Book 7b).
- Book 7a covers the Strategy Stages 6 to 8.

Select ONE worksheet from each book to make up your homework worksheet

## Book AH7b 40x Curriculum Strand Worksheets

- The 40 worksheets in this resource cover the Achievement Objectives as outlined in Mathematics in the New Zealand Curriculum for Number & Algebra, Measurement & Geometry and Statistics.
- These worksheets can be completed in any order.
- One worksheet is selected per week to be done in conjunction with one worksheet from the Number Knowledge Worksheet resource (Book 7a).
- The worksheet selected per week relates to the topic being covered at school or as revision.
- Book 7b covers Level 4 of the Curriculum.



#### Note to Teachers:

The aim of these TWO resources (AH7a & AH7b) are to provide the classroom teacher with a systematic and comprehensive series of worksheets, which form the basis of your mathematics homework.

#### Worksheets from Book 7a:

Photocopy weekly and sequentially in order, a Number Knowledge worksheet from Book 7a. On the Number Knowledge worksheet, pupils can record their Name, Term, Week and the Curriculum Strand Worksheet that is also to be done that week.

#### Worksheets from Book 7b:

• Select and photocopy the appropriate Curriculum Strand Worksheet required, as determined by what you are currently teaching in class or a topic you are revising. In the table on the next page, record the curriculum worksheet being used each week.

#### **Extension Activity for Parents:**

- Each Curriculum Strand Worksheet has an AT HOME activity as an extension activity for parents or caregivers.
- Success in mathematics is greatly enhanced by having a good understanding of Number Knowledge. That is, from being able to add, subtract, multiply and divide with confidence, .... with success .... comes enjoyment.
- Either staple the two worksheets together or create a double sided homework sheet.

## Book 7a (AH7a) - Number Knowledge Worksheets

Number Knowledge Worksheet		n & Week details below	Curriculum Strand Worksheet Enter the worksheet number issued each week
1	Term:	Week:	
2	Term:	Week:	
3	Term:	Week:	
4	Term:	Week:	
5	Term:	Week:	
6	Term:	Week:	
7	Term:	Week:	. 0
8	Term:	Week:	
9	Term:	Week:	
10	Term:	Week:	
11	Term:	Week:	
12	Term:	Week:	
13	Term:	Week:	
14	Term:	Week:	
15	Term:	Week:	
16	Term:	Week:	
17	Term:	Week:	
18	Term:	Week:	
19	Term:	Week:	
20	Term:	Week:	

Number Knowledge Worksheet	_	& Week details below	Curriculum Strand Worksheet Enter the worksheet number issued each week
21	Term:	Week:	
22	Term:	Week:	
23	Term:	Week:	
24	Term:	Week:	
25	Term:	Week:	
26	Term:	Week:	
27	Term:	Week:	
28	Term:	Week:	
29	Term:	Week:	
30	Term:	Week:	
31	Term:	Week:	
32	Term:	Week:	
33	Term:	Week:	
34	Term:	Week:	
35	Term:	Week:	
36	Term:	Week:	
37	Term:	Week:	
38	Term:	Week:	
39	Term:	Week:	
40	Term:	Week:	

## Book 7b (AH7b) - Curriculum Strand Worksheets

(Tick next to worksheet as each ONE worksheet is issued per week)

1	Revision	Tick	21	Geometry words & naming angles	Tick
2	Addition & subtraction strategies		22	Reading scales, drawing lines & angles	
3	More addition & subtraction strategies		23	Angle rules	
4	Addition & subtraction of decimals		24	Perimeter	
5	Multiplication strategies		25	Area - Squares and rectangles	7
6	Division strategies		26	Area - Triangles & Parallelograms	
7	Multiplication & division of decimals		27	Volume	
8	Special numbers		28	Time, tables & scale diagrams	
9	Order of Operations		29	2-D and 3-D shapes / Nets	
10	Equivalent fractions / simplifying		30	Grid references & co-ordinates	
11	More fractions		31	Compass points compass bearings	
12	Fractions / decimals / percentages	7,2	32	Rotation & reflection	
13	Multiplying & dividing by powers of 10		33	Translation & enlargements	
14	Negative numbers		34	Column graphs, pictograms & dot plots	
15	Solving equations	7	35	Stem and leaf graphs & time series graphs	
16	Using formulae		36	Frequency tables, histograms & % bar graphs	
17	Number patterns or sequences		37	Pie Graphs	
18	Measuring units - length	, - <u> </u>	38	Finding 'averages' and the range	
19	Measuring units weight (mass)		39	Interpreting data / Creating a report	
20	Measuring units volume (capacity)		40	Outcomes / Probability	

## Number Knowledge Worksheet Section

The	following	acti	vities ar	e cover	ed in wo	rksheet	s 1 to 10:				
•	Read and sequence.		numbers	while <b>ski</b> j	o counting	g in 3's, 4	's, 5's, 6's, 7's	s, <b>8's</b> and	<b>9's</b> in a <b>for</b>	ward or ba	ckward
	Example:	7, 14	, 21,	, 35,	, 49,	, 63,	, 77, 84,	, 98,	etc.	J	
•	Skip cour		n <b>3's</b> , <b>4's</b>	, 5's, 6's,	<b>7's</b> , <b>8's</b> ar	nd 9's wri	i <b>te</b> the number	that come	s <b>after</b> , be	fore or bety	ween the
	Example:	after	18,	, bef	ore	, 36     l	between 54, _	, 66	5		
•	decimals, answers, f and decim	whole round finding als, co umber	numbers ing whole a fraction onverting	or decima numbers of a grou between o	or decima up of shape commonly	Is to the res and of used frac	in a matrix, ex nearest 10, 100 a whole numb tions, decimals number, addin	), 1000 or er, multiply s and perce	1 <mark>0th</mark> and fir ving and div entages, fir	nding estima viding large nding a perc	ated numbers centage of
•	Using 3 dig	-					s that add up s.	to and in	clude 18, ir	ncluding su	btraction
	Example:	244 +	- 142 = <u> </u>	<i>, 4</i> 25	+	387, 495	- 276 =,	935	= 493		
•						•	n / division fac				
	Example:	9 x	2 =	, 7x3 =	, 3 <i>x</i>	z = 2	21 and 35	÷ 5 =	77		
The	following	acti	vities <mark>a</mark> r	re cover	ed in wo	rksheet	s 11 to 20:	1			
•	<ul> <li>ordering</li> <li>writing of</li> <li>adding r</li> <li>explorin</li> <li>rounding</li> <li>finding a</li> <li>converti</li> <li>multiplyi</li> <li>order of</li> <li>converti</li> <li>finding a</li> <li>finding a</li> <li>dinding a</li> <li>adding a</li> </ul>	unting y whole decimal numbers of place growing and fracting being an area from the squand summer of the squand squand summer of the squand sq	in multiple e number als as nun ers in a m bers to th ion of a g tween imp d dividing ations, BE tween cor entage of	es, stating s or decimenter word atrix; sing mone to enearest roup of shoroper fract large nur DMAS; mmonly us a whole requare root integers;	numbers nals; s; ey, whole r 10, 100, 1 apes, a whetions and mbers and	numbers a 000, 10th nole numb mixed nu decimals		finding esti al;			
•	combination	ons, b	y using ap	opropriate	number s	trategies				ncluding su	btraction
_	•						- 296 =,	915	_ = 373		
•	Revise the	4X, 6	x, /x, 8x	and <b>9x</b> m	uitipiicatioi	n / aivisioi	n iacts.				

Example:  $9 \times 8 = ___, 7 \times 6 = ___, 8 \times ___ = 56$  and  $54 \div 9 = ____$ 

The fo	ollowing activities are covered in worksheets 21 to 30:
• s	SEVENTY-TWO activities involving
-	skip counting in multiples, stating numbers that come before after
-	writing decimals as number words and number words as decimals

- or between given numbers;
- writing decimals as number words;
- adding numbers in a matrix;
- exploring place value using money, whole numbers and decimals,
- rounding numbers to the nearest 10, 100, 1000, 10th or 100th and finding estimated answers;
- finding a fraction of a group of shapes, a whole number or a decimal;
- creating equivalent fractions;
- converting between improper fractions and mixed numbers;
- multiplying large numbers or decimals and multiplying by 10,100 or 1000;
- dividing large numbers or decimals and dividing by 10, 100 or 1000;
- order of operations, BEDMAS;
- converting between commonly used fractions, decimals and percentages;
- finding a percentage of a whole number or decimal;
- finding the square or square root of a number;
- adding and subtracting integers;
- solving equations:
- simple word problems.
- Using 3 digit numbers, revise the number combinations that add up to and include 18, including subtraction combinations, by using appropriate number strategies.

Revise the 4x, 6x, 7x, 8x and 9x multiplication / division facts.

```
Example: 9 \times 8 = ___, 7 \times 6 = ___, 8 \times ___
                                                                             54 \div 9 =
```

The following activities are covered in worksheets 31 to 40:

#### SEVENTY-TWO activities involving ...

- skip counting in multiples, stating numbers that come before after or between given numbers;
- writing decimals as number words and number words as decimals;
- writing decimals as number words;
- adding numbers in a matrix;
- exploring place value using money, whole numbers and decimals,
- rounding numbers to the nearest 10, 100, 1000, 10th or 100th and finding estimated answers;
- finding a fraction of a group of shapes, a whole number or a decimal;
- creating equivalent fractions;
- converting between improper fractions and mixed numbers;
- multiplying large numbers or decimals and multiplying by 10, 100 or 1000;
- dividing large numbers or decimals and dividing by 10, 100 or 1000;
- order of operations, BEDMAS;
- converting between commonly used fractions, decimals and percentages;
- finding a percentage of a whole number or decimal;
- finding the square or square root of a number;
- adding and subtracting integers;
- solving equations;
- simple word problems.
- Using 3 digit numbers, revise the number combinations that add up to and include 18, including subtraction combinations, by using appropriate number strategies.

Example: Example: 574 + 142 = \_\_\_\_, 355 + \_\_\_\_ = 890, 968 - 531 = \_\_\_\_, 974 - \_\_\_ = 695

Revise the 4x, 6x, 7x, 8x and 9x multiplication / division facts.

 $8 \times 5 =$ \_\_\_\_\_\_,  $7 \times$ \_\_\_\_\_\_ = 56, \_\_\_\_\_\_  $\times 9 = 45$ ,  $24 \div 4 =$ \_\_\_\_\_\_,  $48 \div$ \_\_\_\_\_ = 6, \_\_\_\_\_\_  $\div 7 = 6$ Example:

(1) Write in the missing numbers as you skip count in 3's.



3, \_\_\_\_\_, \_\_\_\_, 18, \_\_\_\_\_, 27, \_\_\_\_, 45, 48, 51

(2) Skip counting in 5's, write the number that comes after ...

> 65, \_\_\_\_\_ 40, \_\_\_\_\_ 105, \_\_\_\_

(3) Write these numbers in order from largest to smallest.



838 2.93 0.429 27.13 0.045

(4) Multiplying large numbers.

589

(5) Round these numbers to the nearest 10.

Add and subtract these numbers.

$$(14)$$
 713 - = 249

Multiplying and dividing in 3's, 5's, 7's, 8's & 9's.

$$(19)$$
 7  $\times$  = 7

$$(24)$$
 35 ÷ = 7

$$(20)$$
  $\times$  8 = 72

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	,,	
•		

Term:

Week:

Worksheet:

Working Space

**AWS** 

Write in the missing numbers as you skip count backwards in 5's.



75, \_\_\_\_, \_\_\_, \_\_\_, 50, \_\_\_\_, 40, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, 15, 10, \_\_\_\_\_

(2) Skip counting in 7's, write the number that comes before ...

> \_\_\_\_\_, 35 \_\_\_\_ , 56

(3) What is the place value of the BOLD digit and what does it mean?

Example: In 452 the place value is 10's and it means 50.

(4) What fraction of each group of shapes is shaded?







(5) Add these positive and negative numbers.



Add and subtract these numbers.

$$(12)$$
 845 - 527 =

Multiplying and dividing in 3's, 5's, 7's, 8's & 9's.

$$(16)$$
 3 x 5 =

(19) 
$$7 \times = 42$$

(20) 
$$\times 8 = 8$$

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t	•	4	
r	•	)	

Term:

Week:

Worksheet:

Working Space

AWS

Write in the missing numbers as you skip count in 7's.



(2) **Skip counting** in **8's**, write the number that is between ...

(3) Find each fraction of these whole numbers.

(4) Add all the numbers in this matrix.

6900	9	650	
30	250	20	
820	470	4100	
			Total

(5) Dividing large numbers.

Example: 
$$95 \div 5 = (50 \div 5) + (45 \div 5) = 10 + 9 = 19$$

Add and subtract these numbers.

$$(10) 715 + = 934$$

Multiplying and dividing in 3's, 5's, 7's, 8's & 9's.

$$(17)$$
 **1 x 5** =

$$(19)$$
 7 x = 14

4	1	
_		

Term:

Week:

Worksheet:

Working Space

**AWS** 

Write in the missing numbers as you skip count in 8's.



\_\_\_, \_\_\_\_, 24, \_\_\_\_, \_\_\_, \_\_\_, \_\_\_, 64,

72, \_\_\_\_, 104, \_\_\_\_, 120

(2) Skip counting in 9's, write the number that comes after ...

> 81, \_\_\_\_\_ 45, \_\_\_\_ 108, \_\_\_\_\_

(3) Round these numbers to the nearest 1000.

(4) Shade in part of each group of shapes to show you understand these fractions.





(5) A running race is two laps. If lap 1 is 1840m long and lap 2 is 1260m, how far is the race?

#### Add and subtract these numbers.

#### Multiplying and dividing in 3's, 5's, 7's, 8's & 9's.

$$(17)$$
 5 x 5 =

$$(19)$$
 7 x = 28

$$(20)$$
  $\times$  8 = 48

J
•

Term:

Week:

Worksheet:

Working Space

AWS

Write in the missing numbers as you skip count in 9's.



(2) **Skip counting** in 3's, write the number that comes before ...

```
_____, 18 ______, 36 ______, 60
```

What is the place value of the BOLD digit and what does it mean?

Example: In 4.52 the place value is  $^{1}/_{10}$ 's and it means  $^{5}/_{10}$ .

(4) Find the percentage of these numbers.

50% of 370 = \_\_\_\_\_ 33
$$\frac{1}{3}$$
% of 270 = \_\_\_\_

(5) Round these numbers to the nearest 100.

Add and subtract these numbers.

(7) 
$$207 + 398 = (12) 605 - 398 =$$

Multiplying and dividing in 3's, 5's, 7's, 8's & 9's.

(16) 
$$3 \times 4 =$$
 (21)  $6 \div 3 =$ 

(20) 
$$\times$$
 8 = 16 (25)  $\div$  8 =

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Write in the missing numbers as you skip count in 4's.



\_\_\_\_\_, \_\_\_\_\_, 12, \_\_\_\_\_\_, \_\_\_\_\_, 28, 32,

(2) **Skip counting** in **6's**, write the number that is between ...

48 \_\_\_\_\_ 60, 90 \_\_\_\_\_ 102, 24 \_\_\_\_\_ 36

(3) Fill in the missing fractions, decimals or percentages.



(4) Find each fraction of these decimals.

$$^{1}/_{5}$$
 of 6.5 = \_\_\_\_\_  $^{5}/_{9}$  of 7.2 = \_\_\_\_\_

(5) Multiplying large numbers.

Example:  $21 \times 3 = (20 \times 3) + (1 \times 3) = 60 + 3 = 63$ 

Add and subtract these numbers.

#### Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

$$(17)$$
 1 x 7 =

$$(24)$$
 **27** ÷ = **9**

Write in the missing numbers as you skip count backwards in 6's.



(2) **Skip counting** in **7's**, write the number that comes after ...

```
49, _____ 77, ____ 28, ____
```

(3) Convert these fractions to decimals.

$$^{1}/_{4} =$$
  $^{7}/_{10} =$  Answers: 0.5, 0.25  $^{3}/_{4} =$   $^{1}/_{2} =$  0.75, 0.7

(4) **Dividing** large numbers.

Round these numbers to the nearest 10 or 100 and then work out an estimated answer.

Add and subtract these numbers.

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Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

(16) 
$$4 \times 10 =$$
 (21)  $4 \div 4 =$  (17)  $4 \times 7 =$  (22)  $56 \div 7 =$  (18)  $6 \times 6 =$  (23)  $12 \div 6 =$  (19)  $9 \times$  = 9 (24)  $63 \div$  = 9 (20) \_\_\_  $\times 8 = 32$  (25) \_\_\_  $\div 8 = 9$ 

#### Working Space

Write in the missing numbers as you skip count in 7's.



(2) **Skip counting** in **8's**, write the number that comes **before** ...

\_\_\_\_\_, 48 \_\_\_\_\_, 120 \_\_\_\_\_, 88

(3) Find the percentage of these decimals.

(4) Convert these decimals to percentages.

Answers: 5%, 50% 75%, 25%

(5) Round these numbers to the nearest 10th.

Add and subtract these numbers.

Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

$$(18)$$
 6 x 1 =

$$(19)$$
 9 x = 81

$$(20)$$
  $\times$  8 = 80

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(1) Write in the missing numbers as you skip count in 8's.



(2) Skip counting in 9's, write the number that is between ...

(3) Convert these percentages to decimals.

Answers: 0.75, 0.45 0.8, 0.25

(4) Multiplying decimals.

(5) Find the square of these numbers.

Example:  $3^2 = 3 \times 3 = 9$ 

Add and subtract these numbers.

Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

(17) 
$$10 \times 7 =$$
 (22)  $63 \div 7 =$ 

(18) 6 x 4 = \_\_\_\_ (23) 18 
$$\div$$
 6 = \_\_\_\_

(20) 
$$x = 8 = 40$$
 (25)  $\div 8 = 6$ 

Write in the missing numbers as you skip count backwards in 9's.



(2) Skip counting in 4's, write the number that comes after ...

```
36, _____ 72, ____ 48, ____
```

(3) Find the **square root** of these numbers. Example:  $\sqrt{9} = 3$  as  $3 \times 3 = 9$ 

√121 **=** \_\_\_\_\_

0.9 = \_\_\_\_\_ 0.25 = \_\_\_\_\_ Answers: 
$$\frac{3}{4}$$
,  $\frac{9}{10}$   $\frac{3}{5}$ ,  $\frac{1}{4}$ 

(5) **Dividing** decimals.

#### Add and subtract these numbers.

#### Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

#### Working Space

Term:

Week:

Worksheet:

Working Space

**AWS** 

Write in the missing numbers as you skip count in 9's.



9, \_\_\_\_, 27, \_\_\_\_, \_\_\_, \_\_\_, \_\_\_ \_\_\_\_\_, 90, \_\_\_\_\_, \_\_\_\_, 126, \_\_\_\_\_

Round these numbers to the nearest 10. (2)

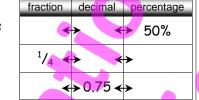
(3) What fraction of each group of shapes is shaded?







(4) Fill in the missing fractions, decimals or percentages.





#### (5) Order of operations.

#### Add and subtract these numbers.

#### Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

$$^{(18)}$$
 7 x 5 =

$$(19)$$
 8  $\times$  = 64

$$(20)$$
  $\times$  9 = 54

1	<b>(</b>
•	74

Term:

Week:

Worksheet:

**AWS** 

(1) Write these numbers in order from smallest to largest.



0.25 1.06 9

0.09

12.04

(2) What is the value of the BOLD digit in each money total? Example: In \$67 the 7 means 7 dollars.



\$45**2** = \_\_\_\_\_

\$8**3**4 = \_\_\_\_\_

(3) Round these numbers to the nearest 100.

(4) Convert these percentages to decimals.

25% = \_\_\_\_\_ 40% = \_\_

(5)

(7)

63

(6) Subtracting large numbers.

Multiplying large numbers using place value.

Example:  $231 \times 3 = (200 \times 3) + (30 \times 3) + (1 \times 3) = 600 + 90 + 3 = 693$ 

Dividing large numbers. (8)

9

Term:

Week:

Worksheet:

Working Space

**AWS** 

Skip counting in 8's, write the number that comes after ...



64, \_\_\_\_\_

72,\_

(2) Round these numbers to the nearest 10 or 100 and then work out an estimated answer.

(3) Shade in part of each group of shapes to show you understand these fractions.



Convert these decimals to percentages. (4)

Answers: 60%, 75% 30%, 25%

(5) Adding large numbers.

(6)

81

6351

(7) Multiplying whole numbers.

920

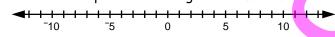
(8) Dividing large numbers using multiples of 10. Example:  $145 \div 5 = (100 \div 5) + (45 \div 5) = 20 + 9 = 29$ 

(1) Write these number words as a numeral.

seventy-two thousand, four hundred and ninety-three

(2) Round these numbers to the nearest 1000.

(3) Add these positive and negative numbers.





(4) Find the square of these numbers.

Example:  $3^2 = 3 \times 3 = 9$ 

$$9^2 =$$

$$7^2 =$$

(5) Adding decimals.

(6) Subtracting decimals.

Multiplying large numbers using 'tidy' numbers.

Example:  $296 \times 3 = (300 \times 3) - (4 \times 3) = 900 - 12 = 888$ 

(8) **Dividing** decimals.

(7)

#### Working Space

1		
	4	•

Term:

Week:

Worksheet:

**AWS** 

Skip counting in 7's, write the number that comes before ...



\_\_\_\_\_, 49 \_\_\_\_\_, 21 \_\_\_\_\_, 63

(2) What is the place value of the BOLD digit and what does it mean?

Example: In 452 the place value is 10's and it means 50.

Find each fraction of these whole numbers. (3)

Convert these decimals to fractions. (4)

Adding decimals. (5)

Subtracting large numbers. (6)

264.17 -

(8) Dividing large numbers using 'tidy' numbers.

Example: 
$$195 \div 5 = (200 \div 5) - (5 \div 5) = 20 - 1 = 19$$

## Working Space

4	
_	

Term:

Week:

Worksheet:

Working Space

**AWS** 

Write this numeral as number words.



50806

(2) Round these numbers to the nearest 10 or 100 and then work out an estimated answer.

(3) Convert these improper fractions to mixed numbers. Example: 11/4 = 23/4

$$^{27}/_{5} =$$



Convert these fractions to decimals.

Order of operations. (5)



$$7 \times 6 - 27 =$$

Add and subtract these numbers.

Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

(20) 
$$\times 9 = 36$$

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(1) Skip counting in 9's, write the number that is between ...



27 \_\_\_\_\_ 45, 63 \_\_\_\_ 81, 81 \_\_\_\_ 99

(2) Round these numbers to the nearest 10th.

(3) What is the value of the BOLD digit in each money total? Example: In \$6.75 the 7 means 70 cents.



\$4.9**5** = \_\_\_\_\_

(4) Find the square root of these numbers.

*Example:*  $\sqrt{9} = 3$  as  $3 \times 3 = 9$ 

(5) Adding large numbers.

Subtracting large numbers. (6)

Multiplying large numbers using place value.

Example:  $231 \times 3 = (200 \times 3) + (30 \times 3) + (1 \times 3) = 600 + 90 + 3 = 693$ 

Dividing large numbers, some with remainders. (8)

#### Working Space

(7)

(1) Write these number words as decimal numerals.



three point zero two four

nineteen point five eight six two

(2) Write two equivalent fractions.

Round these numbers to the nearest 100th. (3)

(4) Convert these fractions to percentages.

Adding large numbers. (5)

Subtracting large numbers. (6)

Multiplying whole numbers. (7)

(8) Dividing large numbers using multiples of 10. Example:  $145 \div 5 = (100 \div 5) + (45 \div 5) = 20 + 9 = 29$ 

(1) Skip counting in 8's, write the number that comes after ...



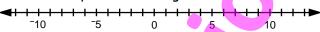
64, \_\_\_\_\_ 32, \_\_\_\_\_ 88,\_

(2) Round these numbers to the nearest 10th and then work out an estimated answer.

Find each fraction of these decimals. (3)

$$^{3}/_{4}$$
 of 5.2 = \_\_\_\_\_  $^{2}/_{3}$  of 3.6 = \_\_\_\_

(4) Add these positive and negative numbers.





Adding decimals. (5)

10 + -4 =

0.15 368,25

0.57

+ 17.80

Subtracting decimals. (6)

584.06

- 37.85

Multiplying large numbers using 'tidy' numbers.

Example:  $296 \times 3 = (300 \times 3) - (4 \times 3) = 900 - 12 = 888$ 

Dividing decimals. (8)

(7)

#### Working Space

(1) Write these decimals as number words.

4.309

13.058

(2) What is the place value of the BOLD digit and what does it mean?

Example: In 4.52 the place value is  $^{1}/_{10}$ 's and it means  $^{5}/_{10}$ .

(3) Convert these mixed numbers to improper fractions. Example:  $4^2/_3 = 1^4/_3$ 

$$4^3/_5 =$$

$$5^2/_3 =$$
 \_\_\_\_\_

$$3^4/_7 =$$



(5) Adding decimals.

Subtracting large numbers. (6)

(7) Multiplying decimals. 53.8

(8) Dividing large numbers using 'tidy' numbers.

Solve these equations. (1)

(2) Round these numbers to the nearest 10.

(3) Find the square of these numbers.

Example: 
$$3^2 = 3 \times 3 = 9$$

(4) Convert these percentages to decimals.

Order of operations. (5)



$$8 \times 12 + 39 =$$

Add and subtract these numbers.

Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

$$(16)$$
 4 x 5 =

$$8 \times 6 =$$

$$(19)$$
 8 x = 32

$$(24)$$
 **72** ÷ = **8**

$$(20)$$
  $\times$  9 = 81

22		
	7)	5)
	Z	//

Term:

Week:

Worksheet:

AWS

(1) Write these numbers in order from smallest to largest.



1.24 16

18.5

0.015

0.149

Working Space

(2) What is the value of the BOLD digit in each money total? Example: In \$6.75 the 7 means 70 cents.



**\$**5.2**7** = \_\_\_\_\_

(3) Convert these percentages to fractions.

Round these numbers to the nearest 100. (4)

Adding large numbers. (5)

Subtracting large numbers. (6)

Multiplying large numbers using place value.

Example:  $231 \times 3 = (200 \times 3) + (30 \times 3) + (1 \times 3) = 600 + 90 + 3 = 693$ 

(8) Dividing large numbers.

(7)

Term:

Week:

Worksheet:

Working Space

**AWS** 

(1) Skip counting in 7's, write the number that comes after ...



63, \_\_\_\_\_

77,\_

(2) Round these numbers to the nearest 10 or 100 and then work out an estimated answer.

Find each fraction of these decimals. (3)

$$^{3}/_{4}$$
 of 8.4 = \_\_\_\_\_  $^{3}/_{8}$  of 3.2 = \_\_\_\_

Convert these decimals to percentages. (4)

Adding large numbers. (5)

158

3564

27

318

Subtracting large numbers. (6)

3637

2241

(7) Multiplying whole numbers. 853

326

x 67

x 9

(8) Dividing large numbers using multiples of 10. Example:  $145 \div 5 = (100 \div 5) + (45 \div 5) = 20 + 9 = 29$ 

Order of operations.

## BEDMAS

$$13 + 36 \div 6 = 7 \times 5 + 16 =$$

(2) Round these numbers to the nearest 1000.

(3) Find the percentage of these numbers.

(4) Find the square root of these numbers.

*Example:*  $\sqrt{9} = 3$  as  $3 \times 3 = 9$ 

Adding decimals. (5)

8.7 + 39.6 + 624.1 =

(6) Subtracting decimals.

(7) Multiplying large numbers using 'tidy' numbers. Example:  $296 \times 3 = (300 \times 3) - (4 \times 3) = 900 - 12 = 888$ 

Dividing decimals. (8)

Working Space

7)	
Z	

Term:

Week:

Worksheet:

Working Space



(1) **Skip counting** in **8's**, write the number that comes **before** ...



\_\_\_\_\_, 64 \_\_\_\_\_, 32 \_\_\_\_\_, 96

What is the **place value** of the **BOLD** digit and what does it mean?

Example: In 452 the place value is 10's and it means 50.

(3) Find the percentage of these decimals.

(4) Convert these decimals to fractions.

(5) Adding decimals.

(6) Subtracting large numbers.

(7) **Multiplying** decimals.

74.1

3.90

x 8

(8) **Dividing large numbers using 'tidy' numbers**.  $Example: 195 \div 5 = (200 \div 5) - (5 \div 5) = 20 - 1 = 19$ 

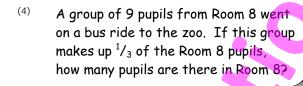
(1) Round these numbers to the nearest 10 or 100 and then work out an estimated answer.

(2) Multiplying by 10, 100 or 1000.

$$8.4 \times 100 =$$

(3) Convert these improper fractions to mixed numbers. Example: 11/4 = 23/4

$$^{21}/_{6} =$$





(5) Order of operations.

## BEDMAS

Add and subtract these numbers.

Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

(24)

(1) Skip counting in 6's, write the number that is **between** ...



(2) Round these numbers to the nearest 10th.

Solve these equations. (3)

Convert these fractions to decimals. (4)

Adding large numbers. (5)

(6)

**Multiplying** large numbers using place value. Example:  $231 \times 3 = (200 \times 3) + (30 \times 3) + (1 \times 3) = 600 + 90 + 3 = 693$ (7)

Dividing large numbers with remainders. (8)





28

(2)

Name:

Term:

Week:

Worksheet:

Working Space

AWS

(1) Write these number words as decimal numerals.



seventeen point zero eight nine

thirty-seven point two five six

Write two equivalent fractions for each.

(3) Round these numbers to the nearest 100th.

(4) A group of 7 pupils from Room12 travel to school by bus.



If this group makes up 25% of the Room 12 pupils, how many pupils are there in Room 12?

(5) Adding large numbers.

(6) Subtracting large numbers.

(7) Multiplying whole numbers.

806

(8) **Dividing** large numbers using 'tidy' numbers. Example:  $215 \div 5 = (200 \div 5) + (15 \div 5) = 20 + 3 = 23$ 

Skip counting in 9's, write the number that comes after ...



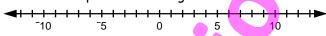
27, \_\_\_\_\_

45, \_

(2) Round these numbers to the nearest 10th and then work out an estimated answer.

(3) Dividing by 10, 100 or 1000.

(4) Add these positive and negative numbers.



Adding decimals. (5)

(6) Subtracting decimals.

3884.1

(7) Multiplying large numbers using 'tidy' numbers.

Example:  $304 \times 3 = (300 \times 3) + (4 \times 3) = 900 + 12 = 912$ 

Dividing decimals. (8)

Write these decimals as number words.

19.024

63.172

(2) What is the place value of the BOLD digit and what does it mean?

Example: In 4.52 the place value is  $^{1}/_{10}$ 's and it means  $^{5}/_{10}$ .

(3) Convert these mixed numbers to improper fractions. Example: 42/3 = 14/3

$$6^{1}/_{7} =$$

$$4^3/_8 =$$



Adding decimals. (5)

Subtracting large numbers. (6)

Multiplying decimals. (7)

(8) Dividing large numbers using multiples of 10. Example:  $145 \div 5 = (100 \div 5) + (45 \div 5) = 20 + 9 = 29$ 

3	4	
5)	,	

Term:

Week:

Worksheet:

AWS

Write in the missing numbers as you skip count in 8's.



8, \_\_\_\_, 32, \_\_\_\_, 104, 112, 120

Round these numbers to the nearest 10 or 100 and then work out an estimated answer.

(3) Find the square root of these numbers. Example:  $\sqrt{9} = 3$  as  $3 \times 3 = 9$ 

(4) Convert these percentages to decimals.

(5) Order of operations.



$$14 + 7 \times 4 - 19 =$$

$$17 - 8 \times 5 \div 4 =$$

Add and subtract these numbers.

$$(14)$$
  $722 - = 158$ 

(18)

$$(22)$$
 54 ÷ 6 =

$$(20)$$
  $\times$  9 = 72

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### Working Space

32		
57	2	2
	51	

Term:

Week:

Worksheet:

**AWS** 

Write these numbers in order from smallest to largest.



4.25

0.45 495 0.046 46.6

Working Space

(2) Find the square of these numbers.

Example:  $3^2 = 3 \times 3 = 9$ 

$$20^2 =$$

Convert these percentages to fractions. (3)

Multiplying by 10, 100 or 1000. (4)

$$7.2 \times 1000 =$$

$$8.6 \times 100 =$$

Adding large numbers. (5)

Subtracting large numbers. (6)

(7) **Multiplying** large numbers using place value. Example:  $231 \times 3 = (200 \times 3) + (30 \times 3) + (1 \times 3) = 600 + 90 + 3 = 693$ 

(8) Dividing large numbers with remainders.

Skip counting in 7's, write the number that comes after ...



6581

(2) Dividing by 10, 100 or 1000.

Find each fraction of these decimals. (3)

$$^{3}/_{5}$$
 of 6.15 = \_\_\_\_\_  $^{5}/_{8}$  of 5.60 = \_\_\_\_

Convert these decimals to percentages. (4)

Adding large numbers. (5)

Subtracting large numbers. (6)

Multiplying whole numbers. (7)

(8) Dividing large numbers using multiples of 10. Example:  $185 \div 5 = (200 \div 5) - (15 \div 5) = 20 - 3 = 17$ 

2	1
┗▜◢	4

Term:

Week:

Worksheet:

**AWS** 

(1) Order of operations.

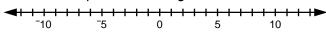
# BEDMAS

 $39 + 63 \div 7 =$ 

$$4 \times 9 + 18 =$$

$$64 - 5 \times 8 =$$

(2) Add these positive and negative numbers.



(3)



what does it mean? Example: In 452 the place value is 10's and it means 50.

#### Find the percentage of these numbers. (4)

5% of 60 = \_\_\_\_\_ 
$$33\frac{1}{3}$$
% of 90 =

$$33\frac{1}{3}\%$$
 of 90 = \_\_\_\_\_

#### (5) Adding decimals.

#### Subtracting decimals. (6)

### - 48.2

#### (7) Multiplying large numbers using 'tidy' numbers.

Example: 
$$296 \times 3 = (300 \times 3) - (4 \times 3) = 900 - 12 = 888$$

#### (8) Dividing decimals with remainders.

## Working Space

Skip counting in 6's, write the number that comes before ...



Write two smaller equivalent fractions (2) for each fraction given.



(3) Find the percentage of these decimals.

70% of 5.6 = \_\_\_\_\_ 
$$66\frac{2}{3}$$
% of 8.1 = \_\_\_\_

$$33\frac{1}{3}\%$$
 of 7.20 = \_\_\_\_\_ 25% of 10.8 = \_\_\_\_

(4) Convert these fractions to percentages.

Adding decimals. (5)

Subtracting large numbers. (6)

Multiplying decimals. (7)

$$\times$$
 4.8

(8) Dividing large numbers using 'tidy' numbers. Example:  $220 \div 5 = (200 \div 5) + (20 \div 5) = 20 + 4 = 24$ 

36

Name:

Term:

Week:

Worksheet:

**AWS** 

Solve these equations with mixed number answers. Example:  $h = 3^4/_7$ 



6a + 53 = 87

(2) Find the **square root** of these numbers.

Example:  $\sqrt{9} = 3 \text{ as } 3 \times 3 = 9$ 

√49 = \_\_\_\_\_

√16 = \_\_\_\_\_

√81 =

√**144** =

(3) Add +, -,  $\times$  or  $\div$  to make each statement true. Remember .... BEDWAS

2 3 7 = 13

25 \_\_\_ 18 \_\_\_ 6 = 22

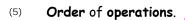
24 \_\_\_ 3 \_\_\_ 6 = 2

37 \_\_\_ 4 \_\_\_ 8 = 5

(4) Convert these improper fractions to mixed numbers. Example: 11/4 = 23/4









39 - 4 × 5 + 8 <u>=</u>

45 ÷ 5 + 7 × 4 =

11 + 36 ÷ 9 - 7 =

9 × 5 - 12 ÷ 4=

 $11 + 6 \times 8 - 37 =$ 

 $7 - 6 \times 8 \div 12 =$ 

### Add and subtract these numbers.

### Multiplying and dividing in 4's, 6's, 7's, 8's & 9's.

$$(16)$$
 4 x 6 =

$$(17)$$
 9 x 6 =

$$(18)$$
 7 x 7 =

$$(19)$$
 8  $x = 64$ 

$$(20)$$
  $\times$  9 = 54

## 7b - 43 = 59 b = \_\_\_\_\_

## Working Space

3	7
$\mathbf{c}$	

Term:

Week:

Worksheet:

**AWS** 

Skip counting in 9's, write the number that is between ...



18 \_\_\_\_\_ 36, 72 \_\_\_\_\_ 90, 99 \_\_\_\_\_ 117

(2) What is the place value of the BOLD digit and what does it mean?

Example: In 4.52 the place value is  $^{1}/_{10}$ 's and it means  $^{5}/_{10}$ .

(3) Dividing by 10, 100 or 1000.

(4) Order of operations.



$$2 \times 4 + 72 \div 8 = 36 \div 9 + 3 \times 8 =$$

$$3(48 \div 6 + 7) = 9(12 - 5 \times 2) =$$

(5) Adding large numbers.

(6) Subtracting large numbers.

Multiplying large numbers using place value.

Example:  $231 \times 3 = (200 \times 3) + (30 \times 3) + (1 \times 3) = 600 + 90 + 3 = 693$ 

Dividing large numbers with remainders. (8)

## Working Space

(7)

Find the percentage of these numbers. (1)

25% of 160 = \_\_\_\_\_ 
$$66\frac{2}{3}$$
% of 480 = \_\_\_\_\_

$$33\frac{1}{3}\%$$
 of 360 = \_\_\_\_\_ 75% of 240 = \_\_\_\_

(2) Solve these equations with mixed number answers. Example:  $h = 3^4/_7$ 



Multiplying by 10, 100 or 1000. (3)

$$0.14 \times 1000 = 123.8 \times 10 =$$

(4) Convert these decimals to fractions.

Adding large numbers. (5)

Subtracting large numbers. (6)

Multiplying whole numbers. (7)

1673

4108

2945

x39

x 7

x 6

(8) Dividing large numbers using 'tidy' numbers. Example:  $195 \div 5 = (200 \div 5) - (5 \div 5) = 20 - 1 = 19$ 

(1) **Skip counting** in **8's**, write the number that comes after ...



(2) **Dividing** by 10, 100 or 1000.

(3) Convert these fractions to decimals.

(4) Order of operations.



- (6) Subtracting decimals.

(7) Multiplying large numbers using 'tidy' numbers.  $Example: 296 \times 3 = (300 \times 3) - (4 \times 3) = 900 - 12 = 888$ 

(8) **Dividing** decimals with remainders.

Multiplying by 10, 100 or 1000. (1)

(2) Find the percentage of these decimals.

$$66\frac{2}{3}\%$$
 of 3.90 = \_\_\_\_\_ 5% of 90.0 = \_\_\_\_

(3) Convert these mixed numbers to improper fractions. Example: 42/3 = 14/3

$$7^2/_9 = 4^5/_8 =$$

$$4^{5}/_{8} =$$

$$9^6/_7 = 6^3/_{10} =$$

$$6^3/_{10} =$$

(4) Add +, -, × or ÷ to make each statement true. Remember .... BEDMAS

Adding decimals. (5)

(6) Subtracting decimals.

Multiplying decimals. (7)

$$\times 0.59$$

$$\times 0.07$$

(8) Dividing large numbers using multiples of 10. Example:  $145 \div 5 = (100 \div 5) + (45 \div 5) = 20 + 9 = 29$ 

					Num	ber Kn	owledge	. I	<b>Nork</b> :	sheet A	nswers		_				
1				2					3					4			
(1)	<u>21</u> , <u>2</u> 4	9, <u>12, 1</u> <u>4</u> , 27, <u>3</u> <u>42</u> , 45		(1)	75, <u>7</u> 50, <u>4</u>	<b>'0</b> , <b>65</b> , <u>9</u> <b>5</b> , 40, <u>2</u> <b>20</b> , 15,	<u>35</u> , <u>30</u> ,		(1)	<b>49</b> , 5	<b>21</b> , 28, 56, <b>63</b> , 7 91, <b>98</b>	· <del></del>		(1)	<u><b>56</b>,</u> 64		40, 48, 30, 88, 2, 120
(2)	65 40 105	70 45 110		(2)	49 28 84	56 35 91			(2)	56 24 88	64 32 96	72 40 104		(2)	81 45 108	90 54 117	
(3)		27.13, 129, 0.0	-	(3)		0 1000 2 100's	's= 7000 s= 900		(3)	40 50		240 300		(3)	9000 2000		3000 27000
(4)	2945	2616	4050	(4)		/ <sub>32</sub> or / <sub>35</sub> or			(4)	30 2 820 4	9 650 50 20 70 4100 <b>29 4770</b>	7559 300 5390 Total 13249		(4)			
(5)	730 240		590 680	(5)	<sup>-</sup> 2 2		-5 -3		(5)	,	· 9) + (7 10 + <mark>8</mark> =			(5)	1840 +	1260 =	= 3100m
(6) (7) (8) (9) (10)	578 688 567 249 419	(11) (12) (13) (14) (15)	115 479 392 464 722	(6) (7) (8) (9) (10	934 857 287	(11) (12) (13) (14) (15)	342 318 455 463 883		(6) (7) (8) (9) (10)	986 777 637 298 219	(11) (12) (13) (14) (15)	363 219 664 596 713		(6) (7) (8) (9) (10)	478 845 725 468 479	(11) (12) (13) (14) (15)	302 419 241 335 931
(16) (17) (18) (19) (20)	30 20 54 1 9	(21) (22) (23) (24) (25)	7 8 3 5 80	(16 (17 (18 (19 (20	50 36 6	(21) (22) (23) (24) (25)	1 9 2 7 64		(16) (17) (18) (19) (20)	18 5 81 2 7	(21) (22) (23) (24) (25)	9 2 7 8 24		(16) (17) (18) (19) (20)	9 25 90 4 6	(21) (22) (23) (24) (25)	8 3 5 10 32
5				6		•	~ 1		7					8			
(1)	63, <u><b>7</b></u>	<b>2</b> , 81, <u>9</u>	45, <u>54,</u> 90, <u>99,</u> 6, 135	(1)	<b>4</b> , <b>8</b> , 28, 3		20, 24, 40, 44, 6, 60		(1)	<u><b>60</b>,</u> 5	34, <u>78, 7</u> 54, <u>48, 4</u> 24, <u>18</u> ,	12, <u>36</u> ,		(1)	<b>49</b> , 56		35, 42, 70, 77, , 105
(2)	15 33 57	18 36 60		(2)	48 90 24	54 96 30	60 102 36		(2)	49 77 28	56 84 35			(2)	<u>40</u> <u>112</u> <u>80</u>	48 120 88	
(3)			$g_{00's} = \frac{8}{100}$ $g_{10's} = \frac{3}{10}$	(3)	1/5 ←	decimal  → 0.25 ←  → 0.2 ←  → 0.75 ←	→ 20%		(3)	0.25 0.75		0.7 0.5		(3)	0.89 1.6		2.1 1.7
(4)	95 185	<b>\</b>	180 90	(4)	12	, s	3.6		(4)	245 458		724 286		(4)	50% 25%		75% 5%
(5)	300 800		1300 1900	(5)	` `	x 8) + ( 0 + 40	,		(5)		60 + 190 - 4200	0 = 360 = 4600		(5)	8.8 67.9		89.4 109.2
(6) (7) (8) (9) (10)	794 605 568 158 318	(11) (12) (13) (14) (15)	312 207 186 564 633	(6) (7) (8) (9) (10	580 738 695	(11) (12) (13) (14) (15)	437 407 177 279 921		(6) (7) (8) (9) (10)	798 760 718 547 513	(11) (12) (13) (14) (15)	565 213 154 287 951		(6) (7) (8) (9) (10)	589 670 734 465 278	(11) (12) (13) (14) (15)	265 355 592 387 974
(16) (17) (18) (19) (20)	12 30 9 9	(21) (22) (23) (24) (25)	2 7 8 3 40	(16 (17 (18 (19 (20	24 7 54 2	(21) (22) (23) (24) (25)	2 7 8 3 16		(16) (17) (18) (19) (20)	40 28 36 1 4	(21) (22) (23) (24) (25)	1 8 2 7 72		(16) (17) (18) (19) (20)	16 42 6 9	(21) (22) (23) (24) (25)	8 3 5 10 8

				ı	1.0			1					1	10			
(1)	<u>56</u> , <u>64</u>	, 72, <u>8</u>	40, 48, 80, 88, 2, 120	•	(1)	<b>99</b> , 90	26, <u>117</u> 0, <u><b>81</b>, <u>7</u> , <u>36</u>, <u>27</u></u>	<b>2</b> , <u>63</u> ,	(1)	9, <u>18</u> , 2 <u>63</u> , 72 <u>108</u> , <u>1</u> :	, <u><b>81</b>,</u> 9	00, <u><b>99</b>,</u>		(1)		, 0.25, 9, 12.0	
(2)	36 72 108	45 81 117	54 90 126		(2)	36 72 48	40 76 52		(2)	590 120		470 840		(2)	\$2 \$30		\$900 \$3
(3)	0.25 0.45		0.8 0.75	•	(3)	7 11		12 8	(3)	8/ <sub>20</sub> 6/ <sub>24</sub> fraction de	or	2/ <sub>5</sub> 1/ <sub>4</sub> percentage	1	(3)	400 400		900 400
(4)	339.5	50	673.2		(4)	<sup>9</sup> / <sub>10</sub> <sup>3</sup> / <sub>4</sub>		<sup>1</sup> / <sub>4</sub> <sup>3</sup> / <sub>5</sub>	(4)		<b>0.5</b> ↔ <b>0.25</b> ↔ <b>0</b> .75 ↔	25%		(4)	0.5 0.25	>	0.75 0.4
(5)	100 36	T .	81 144	=	(5)	5.27 63.8		0.369 4.38	(5)	25 3 57		50 15 61		(5)	3888 1031 4690	7	11763
(6) (7) (8) (9)	649 890 658 573	(11) (12) (13) (14)	216 513 182 567		<ul><li>(6)</li><li>(7)</li><li>(8)</li><li>(9)</li></ul>	739 902 936 384	(11) (12) (13) (14)	412 278 492 348	(6) (7) (8) (9)	798 760 718 547	<ul><li>(11)</li><li>(12)</li><li>(13)</li><li>(14)</li></ul>	216 513 182 567		(6)	1245 12462 23764		5165
(10) (16) (17)	355 20 70	(15) (21) (22)	7 9	•	(10) (16) (17)	407 12 35	(15) (21) (22)	9 2	(10) (16) (17)	324 36 42	(15) (21) (22)	734 7 5		(7)	= 120	+ (40x4 0 + 160 = 1392	
(18) (19) (20)	24 6 5	(23) (24) (25)	3 5 56		(18) (19) (20)	60 4 3	(23) (24) (25)	7 8 48	(18) (19) (20)	35 8 6	<ul><li>(23)</li><li>(24)</li><li>(25)</li></ul>	8 6 36		(8)	378 204		255 671
13				Ī	14			-	15					16			
(1)	24 64 72	32 72 80			(1)		72,493		(1)	42 14 56	49 21 63			(1)	-	ousane Ired ar	d, eight nd six
(2)		) + 200 · 500 =	0 = 300 = 200		(2)	4000 6000		6000 8000	(2)	10's = 20 1's = 7	_	s = 900 s = 60		(2)	90 + 60 800 -	) + 21( · 500 =	
(3)				,	(3)	4 8		-6 3	(3)	80 300		360 450		(3)	$6^{1}/_{2}$ $4^{3}/_{4}$		$5^{1}/_{3}$ $5^{2}/_{5}$
(4)	25% 30%		60% 75%	4	(4)	16 100		81 49	(4)	1/ <sub>2</sub> 3/ <sub>4</sub>		<sup>3</sup> / <sub>5</sub>		(4)	0.5 0.8		0.75 0.25
(5)	3214 2830 657		34705		(5)	141.94 48.64 155.16		5674.0	(5)	190.26 36.7 17.73		542.21		(5)	9 23 63		2 31 15
(6)	770 3582 1867		9188		(6)	286.8 492.43 254.72		31.67	(6)	75.2 573.74 45.6		94.56		(6) (7) (8) (9)	739 902 936 384	(11) (12) (13) (14)	265 355 592 387
(7)	2895 2046		2760 18400 21160		(7)	,	( 5) - (3 ) - 160 =	,	(7)	215.2	58.32	1.245 <u>29.050</u> 30.295	1	(10) (16)	531 28	(15) (21)	738 5
(8)	(400 ÷	4) + (3 0 + 9 =	36 ÷ 4)		(8)	0.56 5.9		9.52 0.386	(8)	(240 ÷ = 30	· 8) - (8 ) - 1 =	8 ÷ 8)		(17) (18) (19) (20)	30 56 6 4	(22) (23) (24) (25)	8 6 4 81

17				18			1	19				Ī	20		
(1)	27 63 81	36 72 90	45 81 99	(1)		3.024 9.5862		(1)	64 32 88	72 40 96			(1)	thirteen po	nree zero nine pint zero five ight
(2)	1.4 25.7		7.9 36.8	(2)	$\frac{3}{4} = \frac{2}{3} = \frac{2}{3}$	$\frac{6}{8} = \frac{9}{12}$ $\frac{4}{6} = \frac{6}{9}$		(2)		+ 6.4 = - 6.2 =			(2)		$^{1}/_{100\text{'s}} = ^{5}/_{100}$ $^{0}$ $^{1}/_{10\text{'s}} = ^{1}/_{10}$
(3)	5c 30c		40c 8c	(3)	4.09 61.22	8.26 48.33		(3)	4.2		1.7 2.4	1	(3)	9/ <sub>4</sub> 17/ <sub>3</sub>	<sup>23</sup> / <sub>5</sub>
(4)	7 8		10 12	(4)	40% 75%	25% 70%		(4)	<sup>-1</sup> 6		5 -9		(4)	<sup>1</sup> / <sub>2</sub> <sup>9</sup> / <sub>10</sub>	<sup>1</sup> / <sub>4</sub>
(5)	5621 3795 7146	i	13947	(5)	5382 654 602	4823		(5)	380.19 454.95 26.655		386.77		(5)	452.24 583.60 20.28	54.71
(6)	855 23261 65459		12680	(6)	85 3912 2963	159		(6)	254.4 281.3 <mark>8</mark> 1171.93		546.21		(6)	72.9 766.87 349.79	59.6
(7)		+ (90x7 0 + 630 = 4858	) + 28	(7)	1544 2313	4452 <u>51940</u> 56392		(7)	(600 x = 3600				(7)	179.0 15.52	48.42 <u>215.20</u> 263.62
(8)	69 89		624 537r6	(8)	1 1	9) + (45 ÷ 9) ) + 5 = 105		(8)	0.64 6.2		0.248 4.17		(8)	, ,	- (27 ÷ 9) - 3 = 97
21				22			Ы	23			Y		24		
(1)	,	d = 13 j = 24		(1)	0.015,	0.149, 1.24, .6, 18.5		(1)	35 63 77	42 70 84			(1)	19 24	51 16
(2)	210 680		410 940	(2)	7c 40c	20c 1c		(2)	70 + 19 1000	90 + <b>5</b> 0 - 500 =			(2)	8000 3000	4000 8000
(3)	36 144		121 25	(3)	1/4	$\frac{3}{5}$ $\frac{1}{20}$ $\frac{3}{10}$ $\frac{3}{4}$		(3)	0.9 6.3		0.8 1.2		(3)	9	36 45
(4)	0.5 0.4	0.25	0.75 0.37	(4)	1000 500	800 400		(4)	50% 25%	43% 5%	60% 75%		(4)	5 9	11 7
(5)	36 6 33	T T	121 36 135	(5)	1529 3773 1794	3937		(5)	1848 207 186		4067		(5)	596.77 373.97 672.4	4835.6
(6) (7) (8) (9)	589 670 734 465	(11) (12) (13) (14)	437 407 177 279	(6)	3650 4986 9456	41025		(6)	684 4777 2335		1396		(6)	143.18 63.422 467.77	72.87
(10) (16) (17)	237 20 48	(14) (15) (21) (22)	658 8 6	(7)	= 420	+ (40x7) + (5x7) 0 + 280 + 35 = 4515	1	(7)	1076 2934		5971 <u>51180</u> 57151		(7)	•	6) - (7 x 8) 56 = 4744
(17) (18) (19) (20)	42 4 9	(23) (24) (25)	4 9 63	(8)	49 65	538 639	-	(8)	(1600 ÷	- 8) + (· 0 + 6 =			(8)	0.73 8.1	5.29 47.9

25				Ş	26				27	7				28			
(1)	56 24 88	64 32 96			(1)	500+80 600 -	+800 300 =		(1)	,	18 42 66	24 48 72	30 54 78	(1)		17.089 37.256	
(2)	10's = 30 1's = 7		's = 100 's = 60		(2)	52 7100		9300 840	(2)	)	2.9 9.9		5.6 7.5	(2)	$\frac{3}{5} = \frac{5}{8} = \frac{1}{2}$	6 10 10 16	$= \frac{9}{15}$ $= \frac{15}{24}$
(3)	0.64 0.7		3.6 3.15		(3)	$3^4/_5$ $4^2/_7$		$= 3^{1}/_{2}$ $= 5^{1}/_{4}$	(3)		7	s = 8 m = 12	2	(3)	1.46 20.93		7.56 63.11
(4)	<sup>1</sup> / <sub>2</sub>	<sup>1</sup> / <sub>4</sub> <sup>67</sup> / <sub>100</sub>	<sup>3</sup> / <sub>5</sub>		(4)		7 pupil		(4)		0.5 0.25	0.75 0.9	0.8 0.73	(4)	28 թար	oils	
(5)	345.45 10.42 246.35		5553.3		(5) (6)	26 41 45 968	(11)	11 55 93 412	(5)		2726 6266 7122		7177	(5)	3750 158 2825	2	6489
(6)	71.50 457.80 1625.43		54.64		(7) (8) (9)	580 738 695	(11) (12) (13) (14)	278 492 348	(6)	,	3947 6590 11654		26421	(6)	4860 9997 4947		4925
(7)	336.5 31.20		66.69 <u>444.60</u> 511.29	(	(10) (16) (17)	224 32 36	(15) (21) (22)	718 4 4	(7)		= 180	+ (70x9 0 + 630 = 2484		(7)	3928 4470		5642 24180 29822
(8)	(700 ÷ 7	, ,	,	(	(18) (19) (20)	28 9 7	(23) (24) (25)	9 7 72	(8)		142 r1 136 r4		399 r4 1150 r7	(8)	(400 ÷ 6	8) + (2 ) + 3 =	
(1)	81 27 45	90 36 54				nineteen p sixty-three		one seven	(1)	8			<u>88</u> , <u>96</u> ,	(1)	0.046	0.45, 6.6, 49	
(2)	36.7 + 94.6 -				(2)	$\frac{1}{100} = \frac{1}{1}$			(2)	-	70 + 50 1000 ·	+ 130 - 400 =		(2)	81 400		36 225
(3)	0.91 0.056		0.033 0.0074		(3)	<sup>19</sup> / <sub>5</sub>		<sup>43</sup> / <sub>7</sub>	(3)		11 5		9	(3)	<sup>3</sup> / <sub>5</sub>	<sup>1</sup> / <sub>2</sub> <sup>3</sup> / <sub>50</sub>	<sup>3</sup> / <sub>4</sub>
(4)	6 1		-3		(4)	50% 7%	90% 25%	40% 75%	(4)		0.5 0.75	0.25 0.47	0.9 0.05	(4)	39 54000		7200 860
(5)	378.70 290.36 219.7		604.51		(5)	380.55 299.11 134.72		5539.9	(5)		7 23 578	(11)	23 42 7 312	(5)	9793 2935 5188		56740
(6)	539.16 76.436 461.36		3188.4		(6)	143.95 670.04 771.52	7	504.64	(8) (8) (9)		688 567 249	(11) (12) (13) (14)	207 186 564	(6)	2868 49243 29423		23167
(7)	(700 x = 4200	, ,	,		(7)	33.90 348.8		1.148 <u>51.660</u> 52.808	(10 (16 (17	)	684 16 24	(15) (21) (22)	637 6 9	(7)		+ (0x8) 00 + 0 = 3272	+ 72
(8)	0.86 15.7		3.46 0.672		(8)	(900 ÷ = 100	9) + (6 ) + 7 =	,	(18 (19 (20	)	63 7 8	(23) (24) (25)	7 8 54	(8)	98 r4 197 r3		342 r4 511 r8

<b>33</b>				34	1				<b>35</b>					36			
(1)	21 56 84	28 63 91		(1)	48		54 24		(1)	12 66 48	18 72 54			(1)	a = 5 b = 1		
(2)	0.00039 0.058		0.41 0.0076	(2)	4 -2		<sup>-</sup> 2 <sup>-</sup> 4		(2)	$\frac{24}{36} = \frac{28}{56} = \frac{28}{56}$	18	$= \frac{6}{9}$ $= \frac{7}{14}$		(2)	7 9	3 <b>+</b> 7 =	4 12 = 13
(3)	3.6 3.69		1.2 3.5	(3)	10's :		100's = 70 10's = 10		(3)	3.92 2.4		5.39 2.7		(3)	25 <b>-</b> 37 -	÷ 3 - 6 18 ÷ 6 - 4 <b>x</b> 8	= 22 = 5
(4)	6% 30%	43% 25%	75% 150%	(4	50		48 30		(4)	50% 70%	80% 75%	25% 9%		(4)	3 <sup>4</sup> / <sub>5</sub> 8 <sup>7</sup> / <sub>8</sub>	>	6 <sup>1</sup> / <sub>2</sub> 7 <sup>4</sup> / <sub>9</sub>
(5)	72 2801 765		54221	(5)	152 884 105.7	.11	3617.6	3	(5)	2.783 261.67 125.73		3470.5	)	(5)	27 8 22	2	37 42 3
(6)	754 57374 4560		9456	(6)		4.5 .77 .29	516.	5	(6)	30.3 123 2137.5	.48	91.88		<ul><li>(6)</li><li>(7)</li><li>(8)</li><li>(9)</li></ul>	649 890 658 573	(11) (12) (13) (14)	565 213 154 287
(7)	1904 4653		42357 <u>121020</u> 163377	(7)	,		) - (45 x 9) 405 = 7695		(7)	2.445 1.422		0.4712 2.3560 2.8272		(10) (16) (17)	513 24 54	(15) (21) (22)	951 9 7
(8)	(900 ÷	9) - (2 0 - 3 =		(8)	1.29 29.1		16.02 r 0.936 r		(8)	* /	8) + (6 0 + 8 =	64 ÷ 8) = 58		(18) (19) (20)	49 8 6	(23) (24) (25)	5 8 54
				_						7							
<b>37</b>				3					39					40			
(1)	18 72 99	27 81 108	36 90 117	(1)	40		320 180		(1)	64 72 32	72 80 40			(1)	1230 7600		19000 0.6
	72	81 108 0 1/10	90 117 $_{0's} = \frac{2}{100}$		40 120 d		180			72	<u>80</u>	3.41 0.0126			7600 0.9 2.6 (	1 d.p.)	9.6 4.5
(1)	$72 \\ 99$ $^{1}/_{10's} = ^{9}/_{1}$	81 108 0 1/10	90 117 $_{0's} = \frac{2}{100}$	(1)	40 120 d k	$0 = 5^{4}/9 = 10^{1}$	180		(1)	72 32 0.0039	<u>80</u>	0.0126	-	(1)	7600 0.9 2.6 ( <sup>65</sup> / <sub>9</sub> <sup>69</sup> / <sub>7</sub>		9.6 4.5 <sup>37</sup> / <sub>8</sub> <sup>63</sup> / <sub>10</sub>
(1)	$72 \\ 99$ $\frac{1}{100} = \frac{9}{1}$ $\frac{1}{100} = \frac{3}{1}$ $0.0921$	81 108 0 1/10	90 117 $0's = {}^{2}/_{100}$ $10's = {}^{4}/_{10}$ 0.934	(1)	40 120 d k =	$0 = 5^{4}/9 = 10^{1}$ $0 = 10^{1}$	180		(2)	72 32 0.0039 0.2158	80 40 0.8	0.0126	-	(1)	7600  0.9 2.6 (  65/9  69/7  5 x 36 ÷ 40 -	4 + 9 = 9 + 7 <b>3 x</b> 6 =	$0.6$ $9.6$ $4.5$ $3^{37}/_{8}$ $6^{3}/_{10}$ $= 29$ $= 11$ $= 22$
(2)	$72 \\ 99$ $\frac{1}{10^{\circ}s} = \frac{9}{1}$ $\frac{1}{100^{\circ}s} = \frac{3}{1}$ $0.0921$ $1.158$	81 108 0 1/10	90 117 $0^{1}$ = $2^{1}$ $0^{1}$ s = $2^{1}$ $0^{1}$ s = $2^{1}$ $0^{1}$ 0.934 0.0064	(1)	40 120 d k: 14 92 3/ <sub>50</sub> 3/ <sub>4</sub>	$0 = 5^{4}/9 = 10^{1}$ $0 = 10$	1238 740 1238 740		(1) (2) (3) (4)	72 32 0.0039 0.2158 0.5 0.09	0.8 0.75	0.0126 0.25 0.375	-	(1)	7600  0.9 2.6 (  65/9  69/7  5 x 36 ÷ 40 -	4 + 9 = 9 + 7	$0.6$ $9.6$ $4.5$ $3^{7}/_{8}$ $6^{3}/_{10}$ $= 29$ $= 11$ $= 22$
(1) (2) (3) (4)	72 99 1/ <sub>10's</sub> = 9/ <sub>1</sub> 1/ <sub>100's</sub> = 3/ <sub>2</sub> 0.0921 1.158 17 45 10180 41604	81 108 0 1/10	$90$ 117 $0's = {}^{2}/_{100}$ $0.934$ $0.0064$ $28$ $18$	(3	3/ <sub>5</sub> 3/ <sub>4</sub> 136 583 172 7 328	$0 = 5^{4}/6 = 10^{1}$ $0 = 10^{1}$ $0 = 360$ $0 = 360$ $0 = 202$ $729$	180 9 / <sub>4</sub> 1238 740 9/ <sub>25</sub> 1/ <sub>4</sub> 1/ <sub>2</sub> 4/ <sub>5</sub>	1	(1) (2) (3) (4) (5)	72 32 0.0039 0.2158 0.5 0.09 55 8 119.453 262.68	0.8 0.75	0.0126 0.25 0.375 28 66	-	(1) (2) (3) (4)	7600  0.9 2.6 ( $^{65}/_{9}$ $^{69}/_{7}$ 5 <b>x</b> 36 ÷ 40 - 13 +	4 + 9 = 9 + 7 3 x 6 = 28 ÷ 7	$0.6$ $9.6$ $4.5$ $3^{37}/_{8}$ $6^{3}/_{10}$ $= 29$ $= 11$ $= 22$ $= 17$
(1) (2) (3) (4)	72 99 1/ <sub>10's</sub> = 9/ <sub>1</sub> 1/ <sub>100's</sub> = 3/ <sub>2</sub> 0.0921 1.158 17 45 10180 41604 20150 2637 38408 150925 (400x7) + = 2800	81 108 0 1/100 1/	90 117 $0's = {}^{2}/_{100}$ 0.934 0.0064 28 18 39377 47421 (2) + (3x7) (3) + (3)	(3 (4 (5	40 120 d k: 144 92 3/ <sub>5</sub> 3/ <sub>4</sub> 136 583 172 7 328 32	$0 = 5^{4}/6 = 10^{1}$ $0 = 10$	180 9 /4 1238 740 9 9 /25 1/4 1/2 4/5 2847	11 66 77 00	(1) (2) (3) (4) (5)	72 32 0.0039 0.2158 0.5 0.09 55 8 119.453 262.68 6950.79 7.56 332.46 5612.24	0.8 0.75	0.0126 0.25 0.375 28 66		(1) (2) (3) (4)	7600  0.9 2.6 (  65/9  69/7  5 x 36 ÷ 40 - 13 + 61.3 20.643 272.42 652.27 391.2	4 + 9 = 9 + 7 3 x 6 = 28 ÷ 7	$0.6$ $9.6$ $4.5$ $3^{7}/_{8}$ $6^{3}/_{10}$ $= 29$ $= 11$ $= 22$ $= 17$ $482.3$