



ANSWER SHEET



Arithmetic Quiz answers

Mild:

Question number	Question	Answer	Marks
1	$4 + 7 = \square$	11	1
2	$\square = 10 \times 4$	40	1
3	$34 + 40 = \square$	74	1
4	$20 - 16 = \square$	4	1
5	$4 + \square = 14$	10	1
6	$3 \times 5 = \square$	15	1
7	$\square = 6 + 7 + 3$	16	1
8	$\frac{1}{4}$ of 8 = $\square$	2	1
9	$32 = \square + 25$	7	1
10	$24 + 23 = \square$	47	1
11	$\frac{1}{2}$ of 14 = $\square$	7	1
12	$9 \times 2 = \square$	18	1
13	$\square + 40 = 60$	20	1
14	$86 - \square = 25$	61	1
15	$\frac{1}{3}$ of 15 = $\square$	5	1
Total marks			15

Medium and Spicy:

1	$19 - 6 = \square$	13	1
2	$8 + 9 + 2 = \square$	19	1
3	$375 + 4 = \square$	379	1
4	$\square = 4 \times 7$	28	1
5	$426 + 50 = \square$	476	1
6	$36 + 49 = \square$	85	1
7	$\square = 36 \div 3$	12	1
8	$\frac{1}{6} + \frac{4}{6} = \square$	$\frac{5}{6}$	1
9	$90 - 26 = \square$	64	1
10	$\frac{1}{3}$ of 24 = $\square$	8	1
11	$8 \times 5 \times 4 = \square$	160	1
12	$\frac{5}{8} - \frac{2}{8} = \square$	$\frac{3}{8}$	1
13	$8 \times 9 = \square$	72	1
14	$36 + \square = 93$	57	1
15	$120 \div 4 = \square$	30	1
16	$71 - \square = 34$	37	1
17	$\square = 50 \times 6$	300	1
18	$27 \times 3 = \square$	81	1
19	$\frac{3}{4}$ of 24 = $\square$	18	1
20	$54 \times 4 = \square$	216	1
Total marks			20

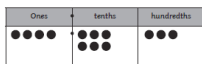
Monday - Writing Decimals

Starter:

 A. $186 + 7 = 193$	 B. $467 + 334 = 801$
 C. $3 \times 7 = 21$	 D. $14 \times 3 = 42$

Mild

- 1) a) 2 ones, 1 tenth, 7 hundredths
2.17 is the number:

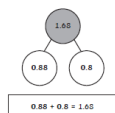


- 2) 4.63 is the number:

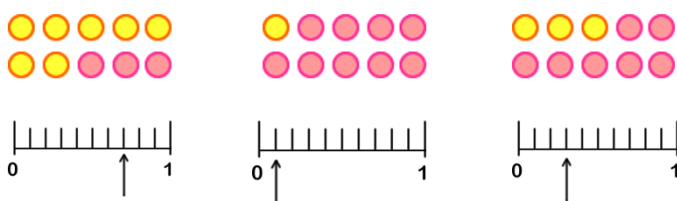
Number	Letter(s)
2.65	b
15.5	a and c
0.52	f and e
13.33	d
5.52	c and e



Multiple possible answers, for example:



For example:

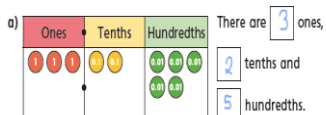


Each example shows a whole being split into ten equal parts. The part that is shown is different each time.

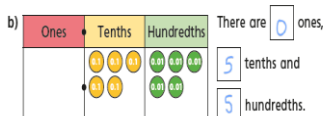
Medium

- 1) Make the number represented on each of the place value charts.

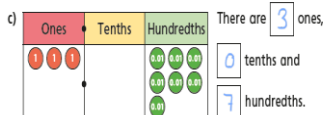
Complete the sentences to describe each number.



The number is 3.55



The number is 0.55



The number is 3.07

- 2) Make each number on a place value chart.

Write the value of the underlined digit.

- a) 6.31 3 tenths (0.3)
b) 12.09 0 ones (0)
c) 0.07 7 hundredths (0.07)
d) 56.82 8 tens (50)

- 3) Alex says the number on the place value chart is 3.4



Do you agree with Alex? No

Explain your answer.

- 4) Fill in the zeros needed as placeholders for each number.

- a)

T	O	Tths	Hths
3	2	0	4

b)

T	O	Tths	Hths
	2	0	4

c)

T	O	Tths	Hths
	0	0	4

d)

T	O	Tths	Hths
	0	5	

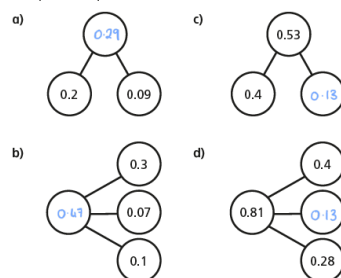
e)

T	O	Tths	Hths
	2		

f)

T	O	Tths	Hths
3	0	5	

- 5) Complete the part-whole models.



- 1) Peter is incorrect.
He has added three hundredths. 1.54 is the correct answer.
- 2) Liliana is incorrect.
Nine is in the hundredths place. It is three ones and nine hundredths.
- 3) 1.54 2.51 3.45 1.59

All the other numbers have five tenths. The circled number has four tenths.



Spicy:

1) a)

3.75	
------	--

10.18	✓
-------	---

60.44	
-------	--

20.25	✓
-------	---

15.17	
-------	--



b) Multiple answers possible. Children choose either 10.18 or 20.25 and write a clue which would separate it from the other number. For example:

10.18: The tenths digit is less than 2.
20.25: The hundredths digit is an odd number.

2) a)

17.08
Lola

12.5
Suzie

2.35
Jed

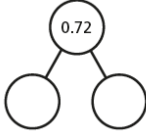
11.97
Mo

b) Multiple answers possible. The children should have given a number greater than 10, with 2 decimal places and no ones. For example:

10.43 20.95 20.71 30.52

6 Here is a part-whole model.

Partition 0.72 in three different ways and complete the number sentences.



$0.7 + 0.02 = 0.72$
 $0.6 + 0.12 = 0.72$
 $0.5 + 0.22 = 0.72$

7 Eva is asked to show 10 tenths on a place value chart.

Here is her answer.

Ones	Tenths	Hundredths
	10 dots	

Annie 0.05 Dora 0.2 Whitney 0.03
 Rosie 0.4 Jack 0.06

Challenge:

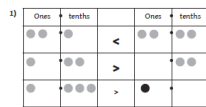
- 0.75
- 0.5
- $\frac{1}{4}$

Tuesday - Compare two decimals

Starter:

 A. $467 + 4 = 471$	 B. $642 + 339 = 981$
 C. $363 + 475 = 838$	 D. $\frac{1}{4}$ of 12 = 3

Mild:



2) Multiple answers are possible for line three, children should show a number less than 1.3 by drawing counters.

12.35	<	12.53
1.5	>	0.3
three ones, four-tenths and six-hundredths	=	3.46
11.03	<	11.3
2.79	<	two ones and eight-tenths

3) Multiple possible answers. For example:

9.05	<	9.12
2.32	>	1.09
one ten, six ones and three-hundredths	=	16.03
22.1	<	22.43
10.33	>	9.44

4) Multiple possible answers. For example:

3) Multiple possible answers. For example:

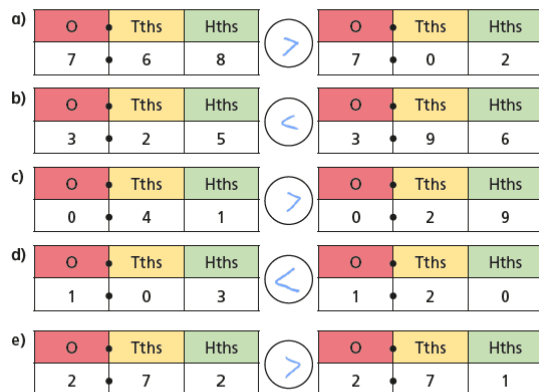
a) $7.53 < 7.63$ or 7.65 or 7.56

b) $5.92 > 5.27$ or 3.25 or 2.03

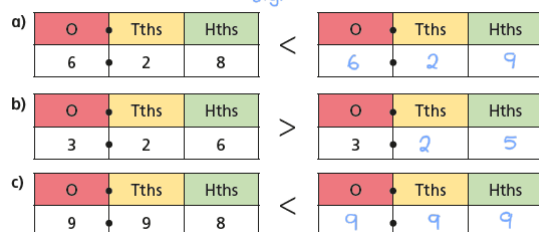
c) $6.34 < 6.53$ or 7.65 or 6.75

Medium:

3 Write < or > to compare the decimals.



4 Complete the place value charts to make the statements correct. e.g.



- 5 Ron and Amir have each made a number using counters on a place value chart.

Ron's looks like this:

Ones	Tenths	Hundredths
	●●●●●	●●

Amir's looks like this:

Ones	Tenths	Hundredths
●●●		

My number is greater than Amir's, because I have used twice as many counters.



Do you agree with Ron? NO

Explain your reasoning.

1)

Snake	Length
anaconda	12m
python	6m
rat snake	1.2m
corn snake	0.6m



- 2) The mystery number is 2.4.

Clue A and Clue D are extra clues.

Clue A is not needed because we know from Clue B that, when you multiply the mystery number, the answer is smaller than 30. This means we know that the mystery number can't have any hundreds.

Clue D is not needed. From Clue B, we know that the mystery number multiplies by 10 to make 21, 22, 23, 24 or 25. This means that the mystery number must be 2.1, 2.2, 2.3, 2.4 or 2.5. All of these numbers only have ones and tenths, so we do not need Clue D.

Spicy:



1)

Snake	Length
anaconda	12m
python	6m
rat snake	1.2m
corn snake	0.6m

2) The mystery number is 2.4.

Clue A and Clue D are extra clues.

Clue A is not needed because we know from Clue B that, when you multiply the mystery number, the answer is smaller than 30. This means we know that the mystery number can't have any hundreds.

Clue D is not needed. From Clue B, we know that the mystery number multiplies by 10 to make 21, 22, 23, 24 or 25. This means that the mystery number must be 2.1, 2.2, 2.3, 2.4 or 2.5. All of these numbers only have ones and tenths, so we do not need Clue D.

7 Write < or > to compare the numbers.

- a) 3.2 $<$ 3.8 c) 1 $>$ 0.99
 b) 1.46 $>$ 1.43 d) 0.16 $<$ 0.8

8 Fill in the missing digits to make the statements correct. e.g.

- a) $0.34 < 0.3$ 5 d) 1.3 1 < 1.3 2
 b) $2.42 > 2.4$ 1 e) $2.$ 4 $2 > 2.$ 3 2
 c) $0.74 < 0.$ 8 2 f) 0.8 9 $< 0.$ 9 9

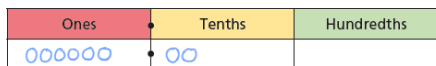
Is there more than one answer for each?

6 Draw exactly 8 counters in each chart to represent a number that matches each statement. e.g.

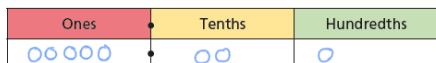
a) a number less than 0.76



b) a number more than 5.74



c) a number between 5.13 and 5.29



9 Here are four digit cards.



Use each digit card once to make this statement correct.

e.g. $70 > 31$

How many possible answers are there?

Challenge:

- 8.4
- >
- a,c,b,d

Wednesday: Order Decimals

Starter:



A. $4 \times 1 = 4$



B. $457 - 137 = 320$



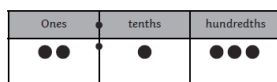
C. $784 + 8 = 792$



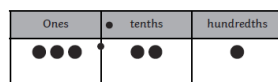
D. $4 \times 14 = 56$

Mild:

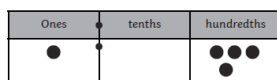
1)



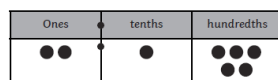
2.13



3.21



1.04



1.25

1.04 1.25 2.13 3.21

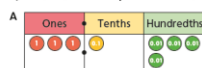
- 3) a) $2.02 < 2.05 < 2.08 < 2.11$
 b) $8.87 > 8.8 > 8.08 > 7.99$
 c) $6.05 < 6.1 < 6.15 < 6.2$
- 4) There are many answers possible. For example:
 $7.18 > 7.16 > 7.15$
 $3.97 < 3.98 < 4.03$
 $5.38 > 5.07 > 5.02$

- 1) Noah has written 2.17 and 2.5 in the wrong order. 2.17 only has one tenth, whereas 2.5 has five tenths so this is the larger number and should come before 2.17 in descending order.

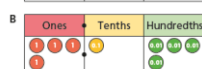


Here are four numbers on place value charts.

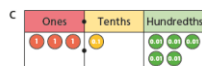
a) What number is represented in each place value chart?



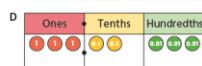
3.14



4.14



3.15



3.23

b) Write the numbers in ascending order.

3.14, 3.15, 3.23, 4.14

smallest

greatest

Medium:

- 2 a) Write digits to show the number represented in each place value chart.

O	Tths	Hths
1	3 3 3 3	6 6 6 6
1	4	2

O	Tths	Hths
1 1	3 3 3 3	
2	3	

O	Tths	Hths
1	3 3 3 3	6 6 6 6
1	3	3

- b) Write the numbers in ascending order.

1.33, 1.42, 2.06, 2.3

- 3 Write the numbers in descending order.

1.42 4.12 1.24 2.41
4.12, 2.41, 1.42, 1.24

- 4 Teddy's teacher asks him to put some numbers in ascending order.

Here is his answer.

0.64 12.7 2.83

Do you agree with Teddy? No

- 2) b) 7.28 7.2 7.19 7.32 7.1

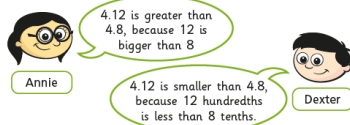
- c) 10.03 10.3 10.35 10.45 10.25

- d) 11.08 10.97 10.75 10.6 10.66

- 3) If the ones digits are all the same, Lydia needs to look at the tenths digit first. If they are all different, then order the numbers by these digits. If some of the tenths digits are the same, then you would look at the hundredths digit. In this set, all of the tenths digits are different.

Correct order is: 4.18 4.4 4.56 4.7

- 5 Annie and Dexter are comparing the decimals 4.12 and 4.8



Who do you agree with? Dexter

Explain your answer.

Spicy:

- 6 Write < or > to complete the statements.

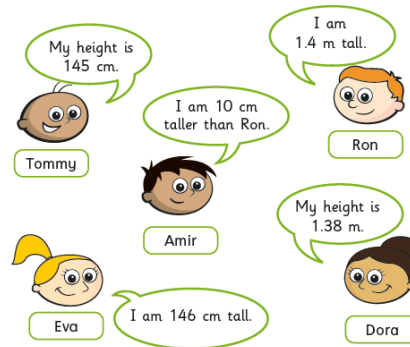
Decide whether the numbers are ascending or descending in each part.

- a) 3.2 < 3.8 < 3.9 ascending
 b) 0.41 > 0.38 > 0.25 descending
 c) 4.2 > 4.17 > 4.085 descending

- 7 Write the numbers in ascending order.

- a) 2.38 0.97 1.45 1.81
0.97, 1.45, 1.81, 2.38
 b) 0.64 0.7 0.09 0.46
0.09, 0.46, 0.64, 0.7
 c) 12.3 2 7.83 0.99
0.99, 2, 7.83, 12.3

- 8 Tommy, Ron, Amir, Dora and Eva have measured their heights.



Write the children's names in order from shortest to tallest.

Dora, Ron, Tommy, Eva, Amir

- 9 Here are two lists of numbers.

Use the digits 0 to 9 once each to complete the lists. e.g.

ascending order 0.41 2.41 7.39 9.41

descending order 9.41 7.49 6.41 5.47

Compare answers with a partner.

Is there more than one way to complete each list?

- 1) a) year 1, year 3, year 6, year 4, year 5, year 2
 b) year 2, year 5, year 4, year 6, year 3, year 1

- 2) There are many possible answers.
 For example:

a) 1.2 1.25 1.73 2.2

b) 8.32 7.9 5.54 5.05

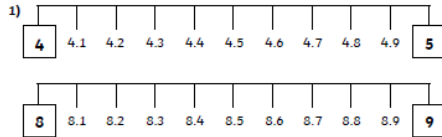


Thursday:

Starter:

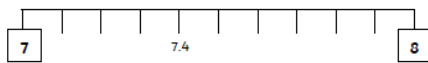
 A. $384 + 30 = 414$	 B. $34 \times 4 = 136$
 C. $4 \times 6 = 24$	 D. $76 \div 4 = 19$

Mild

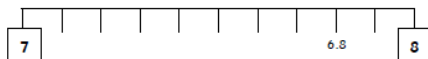


- 2) a) 6.2 is closer to 6 than 7.
6.2 rounds to 6 to the nearest whole number.
6.7 is closer to 7 than 6.
6.7 rounds to 7 to the nearest whole number.
- b) 8.4 is closer to 8 than 9.
8.4 rounds to 8 to the nearest whole number.
8.9 is closer to 9 than 8.
8.9 rounds to 9 to the nearest whole number.
- c) 10.3 is closer to 10 than 11.
10.3 rounds to 10 to the nearest whole number.
10.6 is closer to 11 than 10.
10.6 rounds to 11 to the nearest whole number.

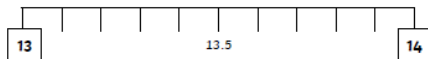
- 3) a) 7.4 rounds to 7 to the nearest whole number.



- b) 6.8 rounds to 7 to the nearest whole number.



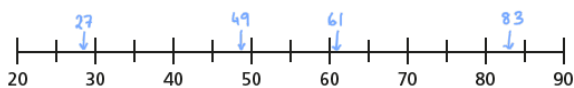
- c) 13.5 rounds to 14 to the nearest whole number.



- 1 Here are some number cards.



- a) Draw arrows to estimate the position of the numbers on the number line.



- b) Use the numbers to complete the sentences.

- 49 is closer to 50 than 40
27 is closer to 30 than 20
83 is closer to 80 than 90
61 is closer to 60 than 70

- 2 Here are some number cards.



- a) Draw arrows to estimate the position of the numbers on the number line.



Medium

b) Use the numbers to complete the sentences.

4.9 is closer to 5 than 4

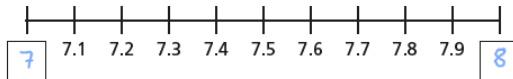
2.7 is closer to 3 than 2

8.3 is closer to 8 than 9

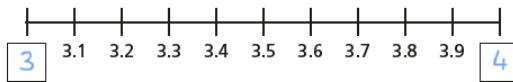
6.1 is closer to 6 than 7

3 Fill in the integers on the number lines.

a)



b)



4 Which integers do the numbers lie between?

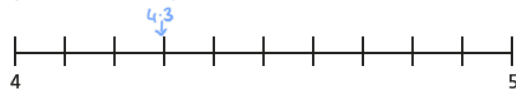
Fill in the boxes to make the statements correct.

a) $1 < 1.4 < 2$

b) $34 < 34.8 < 35$

c) $0 < 0.7 < 1$

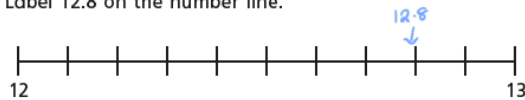
5 a) Label 4.3 on the number line.



Is it closer to 4 or 5?

4

b) Label 12.8 on the number line.



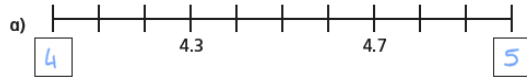
Is it closer to 12 or 13?

13

- 1) Toni is correct. If the tenths digit of a number with one decimal place is a 5, the number is rounded up to the next whole number.
- 2) a) $4.5 \checkmark$ $5.4 \checkmark$ $4.4 \square$ $5.5 \square$ $5.1 \checkmark$
- b) 4.5 rounds up to 5 because the tenths digit is a 5 which is exactly half way between 4 and 5. If a tenths digit is 5, we round up to the next number.
- 5.4 is between 5 and 6. The tenths digit is less than 5 and is closer to 5. Therefore, we round this number to 5.
- 5.1 is between 5 and 6. The tenths digit is less than 5 and is closer to 5. Therefore, we round this number to 5.
- c) Other numbers that round to 5 are: 4.6 4.7 4.8 4.9 5.0 5.2 5.3
- 3) 12.5 rounds to 13 and this has a 5 as the tenths digit.

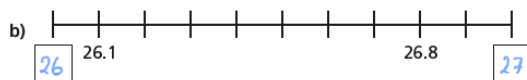


6 Complete the number lines and sentences.



4.3 is closer to 4 than 5

4.7 is closer to 5 than 4



26.1 is closer to 26 than 27

26.8 is closer to 27 than 26

7 Which numbers round up to the nearest whole number?
Circle your answers.

4.1 2.8 0.7 12.3 0.5 99.3

8 Round each decimal to the nearest whole number.

a) 1.8 2 e) 13.7 14
b) 4.2 4 f) 20.1 20
c) 0.9 1 g) 0.4 0
d) 1.5 2 h) 99.8 100

9 Ron is rounding 8.2 to the nearest whole number.



Because 2 tenths is less than 5 tenths, the number rounds down to 7

Do you agree with Ron? No

Explain your answer.

10 Tommy is thinking of a number that has one decimal place.

When he rounds his number to the nearest whole, the answer is 32

What number could Tommy be thinking of?

eg. 32.1

Are there any other answers?

1) a) The smallest answer Jan is thinking of could be 27.5 as this is the smallest number that rounds up to 28.

b) The largest answer Jan is thinking of could be 28.4 as this is the largest number that rounds down to 28.

2) a) 6.5m 7.0m

6.6m 7.1m

6.7m 7.2m

6.8m 7.3m

6.9m 7.4m

3) True. When you round the children's distances and add together this equals 30m. Willow's throw must round to 7m. This means that her throw is between 6.5m and 7.4m. This would be greater than Jayden's throw and less than Kiran's.

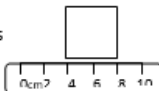
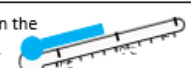
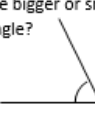
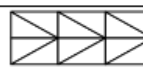


Challenge:

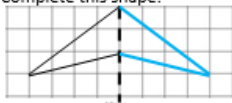
1. 2
2. 28
3. 45cm

Friday

Mild

A: Place Value, Add and Subtract	B: Multiply, Divide and Fractions	C: Measure and Geometry
1. What is 10 less than this number? 106 96	11. $64 \div 8 =$ 8	23. How many grams are there in 2 and a half kilograms? 2500
2. What is the 6 worth in this number? 962 60 (6 tens)	12. $6 \times 4 =$ 24	22. What is the perimeter of this square?  16cm
3. Write < or > to make this correct: 245 254 <	13. $32 \times 2 =$ 64	23. Ian turns through half a turn. How many degrees has he turned through?  180
4. Show 8°C on the thermometer.  Line or arrow	14. There are 3 girls for every 2 boys. If there are 10 boys, how many girls? 15	24. Is this angle bigger or smaller than a right angle?  Smaller
5. Make the largest number possible using the digits 6 3 and 8. 863	15. What is one tenth of 12? 1.2	25. Which pair of lines are perpendicular? a.  b.  b
6. $299 + 1 =$ 300	16. Circle $\frac{5}{7}$ of the marbles.  5	
7. $389 - 237 =$ 152	17. What is $\frac{2}{5}$ of 25? 10	
8. Circle the best estimate to 119 - 58: 60 70 80 90	18. $\frac{4}{1} = \frac{?}{3}$  1	
9. A school has 700 tickets to sell for a play. They sell 537. How many left? 163	19. Add the fractions. $\frac{2}{7} + \frac{4}{7}$ $\frac{6}{7}$	
10. What is the missing number? $33 + \square - 24 = 27$ 18	20. Write the largest fraction. $\frac{1}{5}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{2}$	

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics																
1. What is the missing number? 1,000 2,000 3,000 5,000	4.1 4,000	11. $12 \times 6 =$	4.8 72	21. How many centimetres are there in 4.25 metres?	4.19 425															
2. What is the missing number? 200 250 275 300	4.1 225	12. Complete the sum that is equal to $2 \times 3 \times 12$: $12 \times \square$	4.10 6	22. Tick (✓) the shape that has more than one line of symmetry.	4.25 Rectangle															
3. Round this number to the nearest 1,000: 5,731	4.2 6,000	13. $429 \times 3 =$	4.11 1,287	23. Complete this shape:	4.26 Shape drawn															
4. What is 1,000 more than 2,960?	4.2 3,960	14. To work out 62×7 you could do: $60 \times \square + \square \times 7$	4.12 7, 2																	
5. If the temperature starts at 4°C, then drops by 12°C, what is it now?	4.3 -8°C	15. $\frac{?}{40} = \frac{5}{8}$	4.13 25																	
6. What is the value of the 9 in this number? 3,296	4.4 90	16. What is the missing number? 4.00 4.01 4.02 4.03	4.14 4.04	24. This table shows how teachers and students own different pets:	4.29 23															
7. Write the number 38 in Roman numerals.	4.5 XXXVIII	17. $\frac{8}{1} + \frac{5}{1}$	4.15 $\frac{13}{1}$	<table border="1"><thead><tr><th></th><th>Dog</th><th>Cat</th><th>Rabbit</th><th>Mouse</th></tr></thead><tbody><tr><td>Teacher</td><td>13</td><td>19</td><td>9</td><td>5</td></tr><tr><td>Student</td><td>28</td><td>23</td><td>14</td><td>8</td></tr></tbody></table>		Dog	Cat	Rabbit	Mouse	Teacher	13	19	9	5	Student	28	23	14	8	
	Dog	Cat	Rabbit	Mouse																
Teacher	13	19	9	5																
Student	28	23	14	8																
8. $3,629 + 5,318 =$	4.6 8,947	18. Write 0.75 as a fraction.	4.16 $\frac{3}{4}$	How many students have cats?																
9. Estimate the answer to: $15,982 - 8,025$	4.7 8,000	19. $123 \div 100 =$	4.17 1.23	25. Which pet is the most popular?	4.30 Cat															
10. From 750 tickets, pupils buy 205 & parents buy 478. How many are left?	4.8 67	20. Using £20 Rob buys a top for £8.90 and a scarf for £5.50. How much left?	4.18 £5.60																	

