Answers for the maths mats

Year 5 Maths Activity Mat: 1
Answers

Section 1

Order the following numbers from smallest to largest.

| 471 741 | 417 471 | 471 174 | 417 741 | 471 417 |

| 417 471 | 417 741 | 471 174 | 471 417 | 471 741 |

smallest   largest

Section 3

Fatima has 36 cakes to share with some friends. She could share the cakes so 36 children have 1 cake each. Explain four other ways she could share the cakes equally without cutting the cakes.

__2__ children have __18__ cakes each.   __4__ children have __9__ cakes each.

__3__ children have __12__ cakes each.   __6__ children have __6__ cakes each.

Section 2

Three classes of children raise money for Comic Relief by selling cakes. Each class is given £17.80 to buy ingredients. At the end of the sale, each class counts how much money they have. The classes have £34.82, £29.01, £41.78. After subtracting the amount given to buy ingredients, how much money is raised?

£52.21

Section 7

Calculate the missing angle:

?   81°

33°
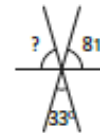
66°

Section 4

Complete the table to convert between mixed fractions and improper fractions.

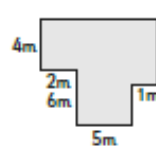| $\frac{13}{4}$ | $3\frac{1}{4}$ |
| $\frac{11}{2}$ | $5\frac{1}{2}$ |
| $\frac{19}{3}$ | $6\frac{1}{3}$ |

Section 5

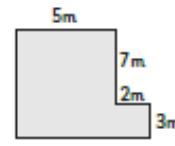Write the equivalent to the fractions and decimal fractions.

$\frac{3}{4}$	0.75
$\frac{2}{3}$	0.667
$\frac{5}{8}$	0.625

Section 6

Calculate the perimeter of these rectilinear shapes:

4m
2m
6m   1m
5m

5m
7m
2m
3m

36m   34m

Section 8

Estimate how many millilitres in a mug.

250ml - 500ml

Year 5 Maths Activity Mat: 2

Answers

Section 1

Circle the numbers where '5' is in the thousands place:

92 735   92 854

(85 492)

(95 410)   16 905

56 892

78 501   50 467

27 651   93 578

Section 2

Calculate the following in your head:

$56 + 19 =$ 75

$27 + 54 =$ 81

$82 - 45 =$ 37

$92 - 38 =$ 54

Section 3

Calculate:

$5.6 \times 100 =$ 560

$7.69 \times 100 =$ 769

$219 \div 100 =$ 2.19

$3304 \div 100 =$ 33.04

Section 4

Insert the correct symbol to make this number sentence correct. <, > or =

$\frac{4}{5}$	$=$	$\frac{8}{10}$
$\frac{1}{3}$	$<$	$\frac{5}{12}$
$\frac{7}{8}$	$>$	$\frac{33}{40}$

Section 5

Match the following numerals to the equivalent written number.

seventeen point one seven — 17.07

seven point one seven — 7.17

seventeen point zero seven — 17.17
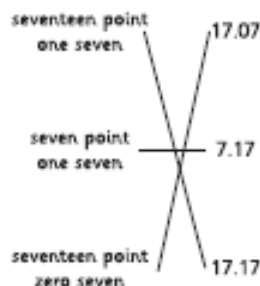
Section 6

Complete the table to convert between millilitres and litres.

Millilitres	Litres
110ml	0.11l
10 000ml	10l
1650ml	1.65l

Section 7

Write regular or irregular under the following shapes:

.... regular .... irregular ....

Section 8

Here is a table showing the number of vehicles that passed a school in one day.

Vehicle	Number
Car	273
Bus	37
Lorry	29
Van	25

Three times as many cars passed the school as other vehicles. How many vans passed the school?

Year 5 Maths Activity Mat: 3

Answers

Section 1

Continue the number sequence.

1099	2099	**3099**	**4099**	**5099**

92 773	91 773	**90 773**	**89 773**

56 923	66 923	**76 923**	**86 923**

718 902	708 902	**698 902**

Section 3

Calculate:

$5 \times 60 =$ **300**

$30 \times 7 =$ **210**

$40 \times 90 =$ **3600**

$80 \times 110 =$ **8800**

Section 5

Round these numbers to the nearest whole number:

$11.5 =$ **12**

$1.96 =$ **2**

$9.12 =$ **9**

$56.29 =$ **56**

Section 7

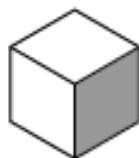How many rectangles are there in this drawing?
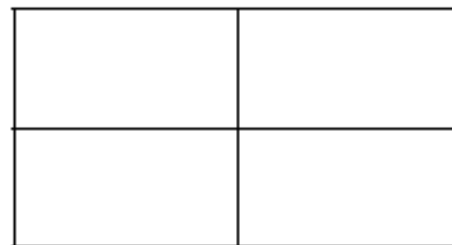
9

Section 2

Write all the prime numbers from 21 to 50.

23, 29, 31, 37, 41, 43, 47

Section 4

Accept any reasonable answer.

For example:
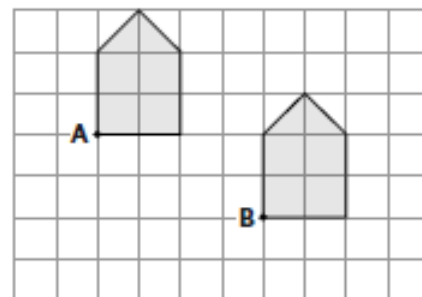
$\frac{1}{3}$ $\frac{3}{9}$

Section 6

Ben gets the 17:12 train. The journey is due to last 1 hour 52 minutes. At what time should the train arrive?

19:04

Section 8

Translate this shape from point A to point B.

A   B

Year 5 Maths Activity Mat: 4
Answers

Section 1

The temperature is -8°C. Two hours earlier, the temperature was 6°C warmer. What was the temperature two hours earlier?

-2°C

Section 3

```
  5 7 [2]        6 [7] 2
+    [3] 9     - [4] 0 [9]
  ‾‾‾‾‾‾‾         ‾‾‾‾‾‾‾
  6 1 1          2 6 3
```

Section 4

Order the following fractions from smallest to largest.

$\frac{2}{3}$ $\frac{11}{12}$ $\frac{5}{6}$ $\frac{13}{18}$

| $\frac{2}{3}$ | $\frac{13}{18}$ | $\frac{5}{6}$ | $\frac{11}{12}$ |

smallest   largest

Section 2

Here are the weekend cinema takings for 29th April - 1st May 2016.

| Captain America | £14 466 681 |
| The Jungle Book | £5 758 824 |

What was the difference in takings between the two films, rounded to the nearest thousand?

£8 708 000

Section 5

Adjacent squares are added together to give the number above. Complete the number wall.

```
         24.8
     13.76   11.04
  6.93   6.83   4.21
```

Section 6

1kg ≈ 2.2lb (pounds)

1 stone = 14lb

How many kilograms in one stone? Give your answer to two decimal places.
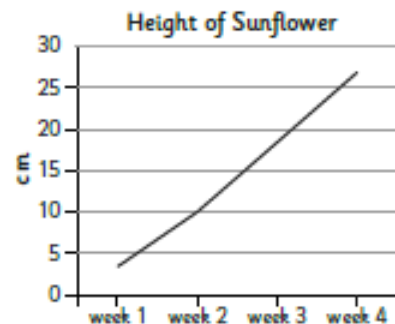
6.36 kg

Section 7

Draw a triangular prism.

Section 8

Children measure the height of a sunflower once a week. They record their measurements in a table.

Week	Height of sunflower (cm)
Week 1	3
Week 2	10
Week 3	18
Week 4	27

Height of Sunflower

Draw the line on the graph.

Year 5 Maths Activity Mat: 5

Answers

Section 1

Write these Roman Numerals as numbers.

CXXVI ⟶ **126**

DCCLXIX ⟶ **769**

Section 3

Calculate:

$426 \times 13 =$ **5538**

$1456 \div 7 =$ **208**

Section 4

Calculate:

$\frac{2}{5} + \frac{1}{10} =$ $\frac{5}{16}$ or $\frac{1}{2}$

$\frac{2}{3} - \frac{1}{12} =$ $\frac{7}{12}$

Section 5

Write the following fractions as percentages:

$\frac{48}{100} =$ **48%** $\frac{19}{100} =$ **19%** $\frac{6}{100} =$ **6%**

Section 2

Circle the square numbers:

①   12   23
5   ⑯   27
41   35
     90
㊾   82
50
   ㉞   99
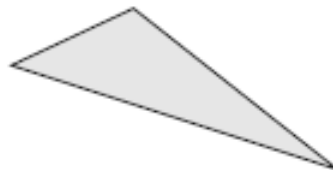58   77
135   71   110
⑫¹   118
⑭⁴   165   ⑯⁹

Section 6

1ml of water weighs 1g. An empty plastic bottle weighs 10g. How much do 4 half-litre bottles full of water weigh in kilograms?

2.04kg

Section 7

Draw a triangle with 2 acute angles and 1 obtuse angle.

Example:

Section 8

Here is a train timetable:

London St Pancras	06:32	07:24	07:58
Leicester	07:52	08:30	09:01
Derby	08:19	09:05	09:25
Chesterfield	08:37	09:27	09:43
Sheffield	08:55	09:41	09:58

Which is the slowest train?   **06:32 (from London)**

Jan needs to arrive in Sheffield by quarter to ten. Which train should she catch from Leicester?   **07:52 or 08:30**

Year 5 Maths Activity Mat: 6

Answers

Section 1

I am a 3-digit number.

I am odd.

I have twice as many hundreds as tens.

I have twice as many tens as ones.

What am I?

421

Section 2

Write the factor pairs of 32.

1 x 32, 2 x 16, 4 x 8

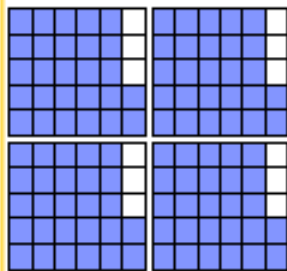Write the common factors of 9 and 27.

1, 3, 9

Section 3

Lucas collects 5p coins. When his jar is full, he shares the money between 3 local charities. He counts the full jar and has 255 5p coins. How much will each charity receive?

£4.25 each

Section 4

Use the visual representation to calculate:

$5\frac{2}{5} \times 4 =$ $21\frac{3}{5}$

Section 5

Complete the table by writing the equivalent fraction or percentage:

$\frac{2}{5}$	40%
$\frac{1}{3}$ or $\frac{33}{100}$	33%
$\frac{4}{5}$	80%
$\frac{1}{2}$	50%
$\frac{3}{4}$	75%

Section 6

Which rectangle has the larger area?

11cm

8cm

5cm A

7cm B

B
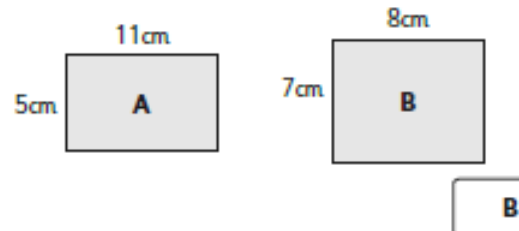
Today you are going to complete some questions and problem solving based purely on decimals and percentages – we have done this in class and home learning but if any help is needed, just contact me ☺

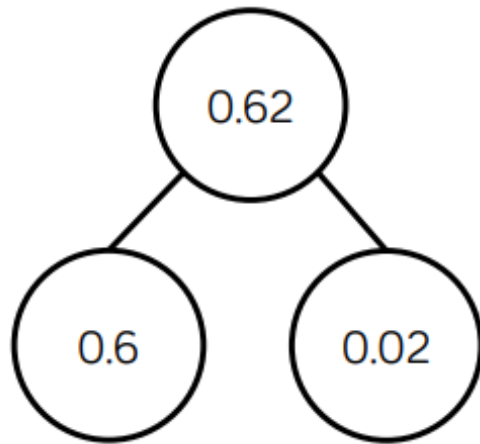Some will take more thinking and explanation than others.

Again, I've added enough in to keep you going so only do an hour if that's all you have time for !

Decimals and Percentages

A

Dexter says there is only one way to partition 0.62

```
        0.62
       /    \
    0.6      0.02
```

Prove Dexter is incorrect by finding at least three different ways of partitioning 0.62

Which number is represented on the place value chart?

Ones	Tenths	Hundredths
	0.1	0.01 0.01
0	1	2

There are ____ ones, ____ tenths and ____ hundredths.

The number is ____

Match each description to the correct number.

My number has the same amount of tens and tenths.

Teddy

Amir

My number has one decimal place.

My number has two hundredths.

Rosie

Eva

My number has six tenths.

| 46.2 | 2.64 | 46.02 | 40.46 |

B

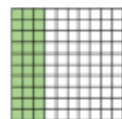**Odd one out**

Which of the images below is the odd one out?

A

0.1
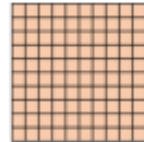
0.1

B

C

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
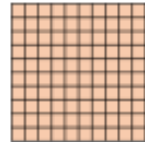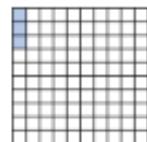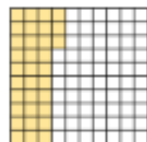
D

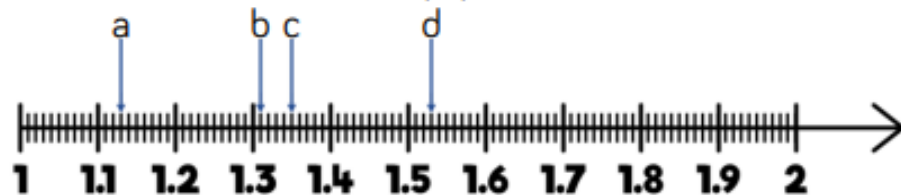$\frac{1}{10}$ $\frac{1}{10}$
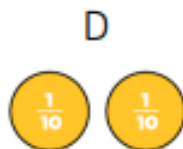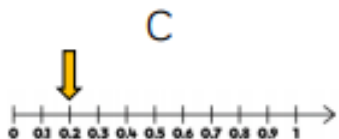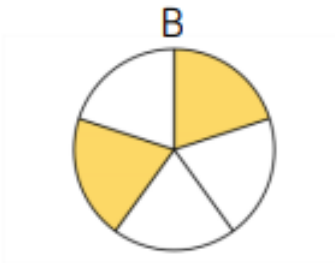
Explain why.

Use the models to record equivalent decimals and fractions.

$$0.3 = \frac{3}{10} = \frac{30}{100}$$
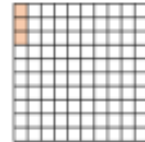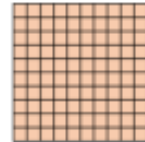
Write down the value of a, b, c and d as a decimal and a fraction.

a   b c   d

1   1.1   1.2   1.3   1.4   1.5   1.6   1.7   1.8   1.9   2

C

Amir says, To convert a fraction to a decimal, take the numerator and put it after the decimal point. E.g. $\frac{21}{100} = 0.21$

Write two examples of converting fractions to decimals to prove this does not always work.

In this problem symbols have been used to represent two different numbers. Write down the value of each, as a mixed number and as a decimal.

$\bigcirc = 1$ $\bigstar = \frac{1}{10}$ $\triangle = \frac{1}{100}$ $\pentagon = \frac{1}{1000}$

0.394

= 3 tenths, 9 hundredths and 4 thousandths

$= \frac{3}{10} + \frac{9}{100} + \frac{4}{1000}$

$= 0.3 + 0.09 + 0.004$

Write these numbers in three different ways:

0.472   0.529   0.307

Dexter is measuring a box of chocolates with a ruler that measures in centimetres and millimetres.

He measures it to the nearest cm and writes the answer 28 cm.
What is the smallest length the box of chocolates could be?

Whitney is thinking of a number.

Rounded to the nearest whole her number is 4
Rounded to the nearest tenth her number is 3.8
Write down at least 4 different numbers that she could be thinking of.

Round each number to the nearest tenth and nearest whole number.

Ones	•	Tenths	Hundredths

Ones	•	Tenths	Hundredths

Ones	•	Tenths	Hundredths
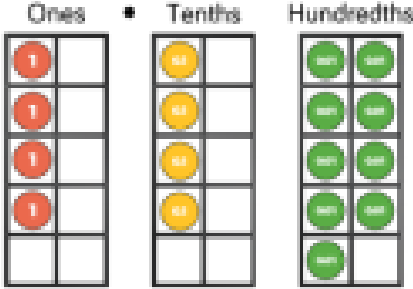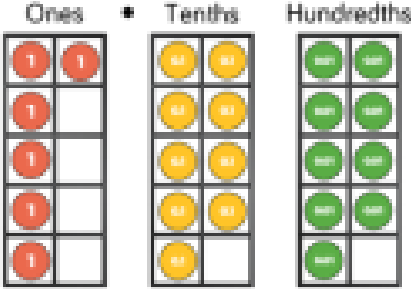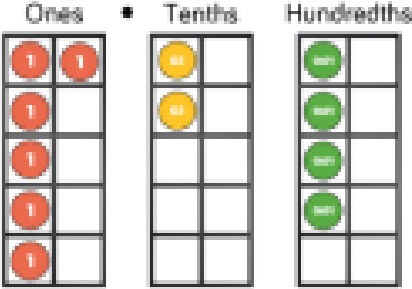
E

Use <, > or = to make the statements correct.

◯

◯   13.33 ÷ 10

Place the numbers in ascending order on the number line.

3.115 $3\frac{113}{1000}$ Three and 11 hundredths

Alex says,

3.105 is greater than 3.2 because 105 is greater than 2

Do you agree?
Explain your answer.

F

Mo, Annie and Tommy all did a test with 100 questions. Tommy got 6 fewer questions correct than Mo.

Name	Score	Percentage
Mo	56 out of 100	
Annie		65%
Tommy		

Complete the table.
How many more marks did each child need to score 100%?
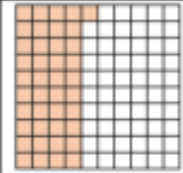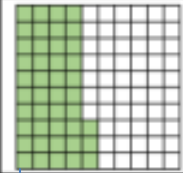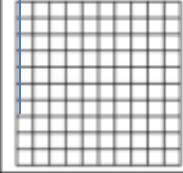
Record the fractions as decimals and percentages.

$$\frac{120}{300} \qquad \frac{320}{400} \qquad \frac{20}{200} \qquad \frac{12}{50}$$

Make the denominator 100 as an equivalent fraction

Dora and Amir each have 100 sweets.
Dora eats 65% of hers. Amir has 35 sweets left.
Who has more sweets left?

Complete the table.

Pictorial	Percentage	Fraction	Decimal
	41 parts per hundred 41%	41 out of 100 $\frac{41}{100}$	41 hundredths 0.41
	43 parts per hundred 43%	43 out of 100 43/100	43 hundredths 0.43
	7 parts per hundred 7%	7 out of 100 7/100	7 hundredths 0.07

Alex has read 93 pages of her book. Her book has 300 pages. What proportion of her book has she read? Give your answer as a percentage and a decimal.

$$\frac{93}{300} = \frac{?}{100} = \underline{\quad} \% = \underline{\quad}$$