

## Year 6 Maths Activity Mat

1

### Section 1

Order the following numbers from smallest to largest:

**373 377, 377 773, 373 737, 377 737**

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

smallest largest

### Section 2

Here are some estimated answers to some calculations. Tick the reasonable estimates.

$$782 \times 11 \approx 8000$$

$$34\,582 + 56\,722 \approx 80\,000$$

$$357 \div 8 \approx 45$$

Explain why any estimates are unreasonable.

.....

.....

.....

### Section 4

Simplify the following fractions:

$$\frac{9}{12} = \boxed{\phantom{00}}$$

$$\frac{10}{25} = \boxed{\phantom{00}}$$

### Section 3

A baker makes 187 buns. He packs them in boxes of 6 buns. How many boxes can he fill from 187 buns?

### Section 5

Calculate:

$$0.5 \times 100 = \boxed{\phantom{00}}$$

$$0.2 \times 100 = \boxed{\phantom{00}}$$

$$0.7 \times 100 = \boxed{\phantom{00}}$$

### Section 6

Convert the following:

$$0.4\text{kg} = \boxed{\phantom{00}}\text{g}$$

$$\boxed{\phantom{00}}\text{kg} = 1700\text{g}$$

### Section 7

Write a description of a cuboid.

.....

.....

.....

### Section 8

Some children research children's favourite colour. They show the results in a pie chart.



32 children were asked about their favourite colour. How many children chose each colour?

red =       green =       blue =

## Year 6 Maths Activity Mat

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### Section 1

What is the value of the digit in the hundred thousands place in 3 409 125?

### Section 2

A cinema sells 1967 tickets. There are adult and child tickets. 785 more adult tickets than child tickets are sold. How many adult tickets are sold?

### Section 3

Calculate:

$$\begin{array}{r} 14 \overline{) 8736} \end{array}$$

### Section 4

Use  $<$ ,  $=$ , or  $>$  to compare these fractions:

|                |  |                |
|----------------|--|----------------|
| $\frac{5}{4}$  |  | $\frac{3}{2}$  |
| $\frac{14}{6}$ |  | $\frac{7}{3}$  |
| $\frac{9}{2}$  |  | $\frac{25}{6}$ |

### Section 5

Calculate

$$0.04 \times 7 = \boxed{\phantom{000}}$$

$$0.05 \times 4 = \boxed{\phantom{000}}$$

$$0.06 \times 8 = \boxed{\phantom{000}}$$

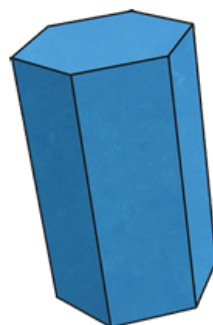
### Section 6

5 miles is 8 km

How many kilometres in 125 miles?

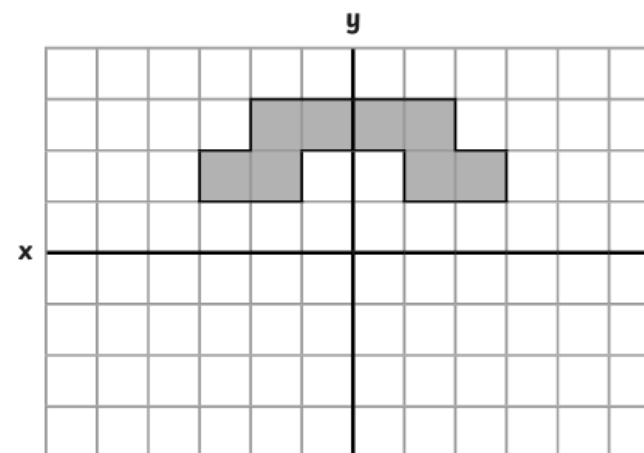
### Section 7

Name this shape:



### Section 8

Reflect this shape about the x axis.



## Year 6 Maths Activity Mat

### Section 1

Round the following numbers to the nearest ten million:

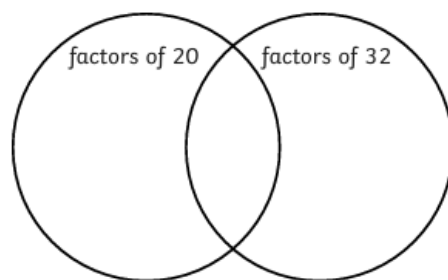
14 892 391 →

15 000 000 →

20 500 000 →

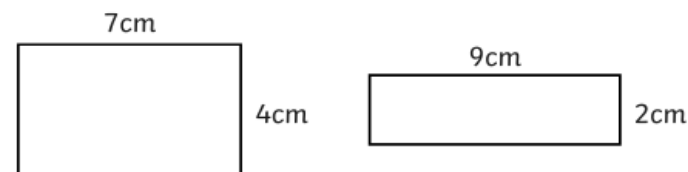
### Section 2

Use this Venn diagram to write the common factors of 20 and 32.



### Section 6

What do you notice about the area and perimeter of these two rectangles?



### Section 3

What number, when doubled, is one fifth of 100?

### Section 4

Calculate:

$$\frac{1}{4} \times \frac{1}{6} = \text{  }$$

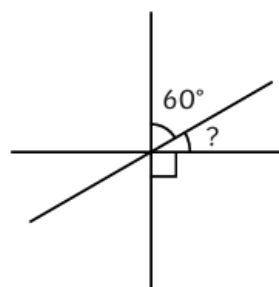
$$\frac{1}{3} \times \frac{2}{3} = \text{  }$$

$$\frac{3}{4} \times \frac{1}{2} = \text{  }$$

$$\frac{2}{4} \times \frac{1}{3} = \text{  }$$

### Section 7

Calculate the unknown angle.



### Section 8

Find 3 pairs of numbers that satisfy these equations:

$$2a - b = 8$$

$$2c + d = 8$$

### Section 5

Calculate, writing the answer as a decimal:

$$5 \overline{) 831}$$

## Year 6 Maths Activity Mat

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### Section 1

At 4am, the temperature is  $-3^{\circ}\text{C}$ . By midday the temperature has risen by  $11^{\circ}\text{C}$ . In the following 11 hours, the temperature falls by  $14^{\circ}\text{C}$ . What is the temperature at 11pm?

### Section 2

Calculate in your head:

$$254 + 340 = \boxed{\phantom{000}}$$

$$281 + 412 = \boxed{\phantom{000}}$$

$$756 - 106 = \boxed{\phantom{000}}$$

$$501 - 89 = \boxed{\phantom{000}}$$

### Section 3

Calculate:

$$11 \times (7 + 2) = \boxed{\phantom{000}}$$

$$9 + (5 \times 5) = \boxed{\phantom{000}}$$

$$(21 + 9) \div 3 = \boxed{\phantom{000}}$$

### Section 4

Circle any fraction and decimal equivalent to  $\frac{3}{10}$ .

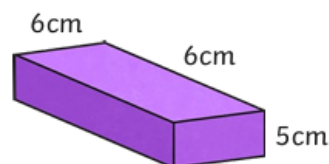
0.3                       $\frac{9}{30}$   
0.35                       $\frac{10}{40}$   
 $\frac{1}{3}$                        $\frac{6}{20}$

### Section 5

Angela has £5.24 in her purse, £17.29 in her bank account and £2.67 in her pocket. How much money has she altogether, rounded to the nearest pound?

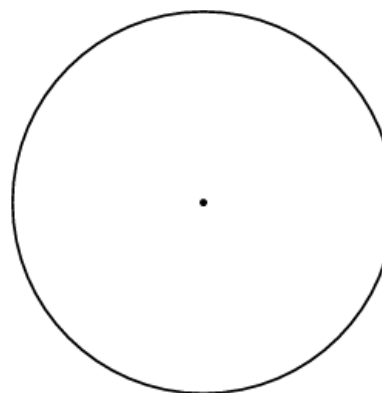
### Section 6

Calculate the volume of this cuboid:



### Section 7

Draw the radius and the diameter of this circle:



### Section 8

Find the mean of these numbers:

12  
16  
17  
11                      19

## Year 6 Maths Activity Mat

5

### Section 1

Use these clues to find the number:

- It is less than 1 000.
- It is a multiple of 5.
- All of the digits are odd.
- The first and last digits add up to 12.
- The tens digit is the largest digit.

### Section 2

Calculate:

$$\begin{array}{r} 1042 \\ \times 13 \\ \hline \\ \hline \end{array}$$

### Section 3

A school library has 2498 books. 329 books are on loan, and 1983 are in the library. The rest are missing. How many books are missing?

### Section 4

Calculate:

$$\frac{1}{3} \div 2 = \boxed{\phantom{000}}$$

$$\frac{1}{2} \div 3 = \boxed{\phantom{000}}$$

### Section 5

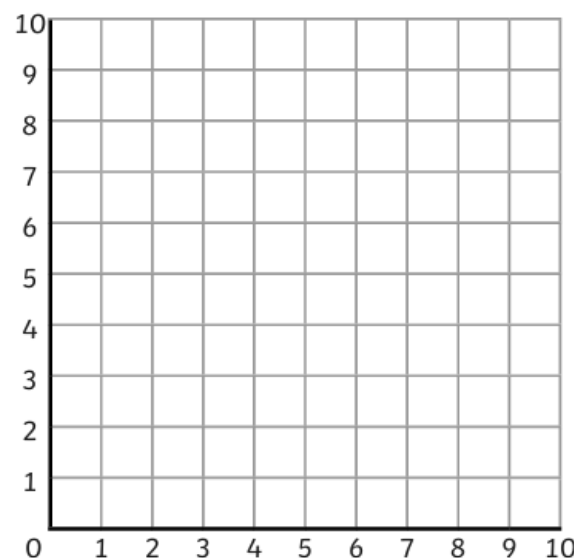
50% of a class are boys. What fractions of the class are boys?

### Section 6

A piece of string 3m long is cut into 12 equal pieces. How long is each piece in metres?

### Section 7

Draw a rectangle on this coordinates grid using the coordinates: (1,2) (9,2) (1,5) (9,5).



### Section 8

**a** and **b** are whole numbers between 3 and 7. Write all the calculations showing the possible values of **a** and **b** where:

$$a + b = 10$$

## Year 6 Maths Activity Mat

6

### Section 1

A bag of balls contains 3 red and 5 blue balls. A school buys some bags of balls. There are 9 red balls. How many blue balls are there?

### Section 4

Calculate:

$$\frac{1}{2} + \frac{1}{4} = \boxed{\phantom{000}}$$

$$\frac{2}{3} - \frac{1}{6} = \boxed{\phantom{000}}$$

### Section 5

There are 20 people in a cinema. Adults pay £10 and children £6. The takings are £164. How many children are in the cinema?

### Section 7

Calculate the angles in this square:



### Section 2

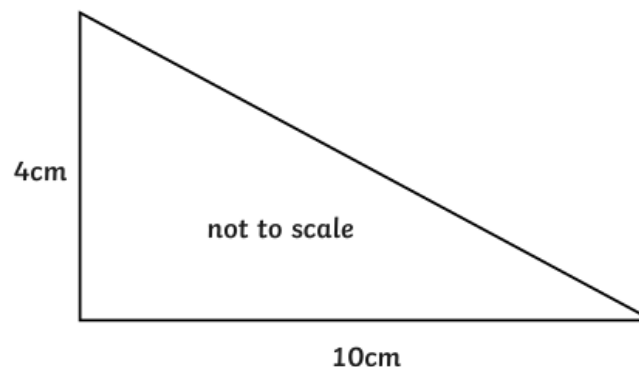
$$y = x + 2$$

If  $x = 6$ , what is  $y$ ?

If  $y = 5$ , what is  $x$ ?

### Section 6

Calculate the area of this right angled triangle:



### Section 8

Express the answer to this word problem algebraically, using  $t$  to represent the number of t-shirts being washed:

Alison has 12 t-shirts. 7 are in her drawer. The rest are being washed. How many t-shirts are being washed?

### Section 3

Calculate:

$$25\% \text{ of } £24 =$$

$$10\% \text{ of } £32 =$$

