

Year 6 Spring 1 Maths Activity Mat 1

Section 1

Order the following numbers from smallest to largest:

494 944 494 494 449 494 449 944 494 499

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smallest

largest

Section 4

Simplify the following fractions:

$$\frac{3}{12} = \frac{\square}{\square}$$

$$\frac{6}{12} = \frac{\square}{\square}$$

Section 2

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

$647 \times 12 \approx 8000$

$35\,819 - 26\,756 \approx 9000$

$357 \div 6 \approx 50$

Explain why any estimates are unreasonable.

Section 3

A farmer picks 237 apples. He packs them in boxes of 15 apples.

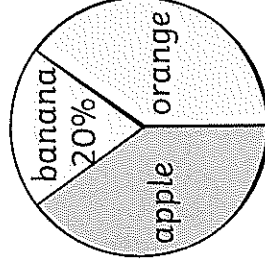
How many boxes can he fill from 237 apples?

Section 7

Write a description of a square-based pyramid.

Section 8

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



30 children were asked about their favourite fruit. How many children chose each fruit?

Apple , Banana , Orange

Section 5

Calculate:

$0.2 \times 100 =$

$0.8 \times 100 =$

$0.3 \times 100 =$

Section 6

Convert the following:

$0.4\text{kg} =$ _____g

_____kg = 1700g

Year 6 Spring 1 Maths Activity Mat 1 - Answers

Section 1

Order the following numbers from smallest to largest:

494 944	494 494	449 494	449 944	494 499	494 944
449 494	449 944	494 494	494 499	494 944	494 944

smallest largest

Section 4

Simplify the following fractions:

$$\frac{3}{12} = \frac{1}{4}$$

$$\frac{6}{12} = \frac{1}{2}$$

Section 2

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

$647 \times 12 \approx 8000$

$35\,819 - 26\,756 \approx 9000$

$357 \div 6 \approx 50$

$357 \div 6 = 60$ is a much more reasonable estimate.

Explain why any estimates are unreasonable.

Section 3

A farmer picks 237 apples. He packs them in boxes of 15 apples. How many boxes can he fill from 237 apples?

15

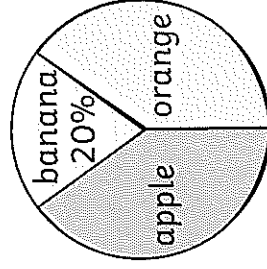
Section 7

Write a description of a square-based pyramid.

A square-based pyramid has one square face and four triangular faces. The square face is at the base of the shape. One triangle meets each edge of the square, and one edge of each triangle meets the adjacent edge of the next triangle. The four meet at a point called the apex.

Section 8

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



30 children were asked about their favourite fruit. How many children chose each fruit?

Apple , Banana , Orange

Section 5

Calculate:

$0.2 \times 100 = 20$

$0.8 \times 100 = 80$

$0.3 \times 100 = 30$

Section 6

Convert the following:

$0.4\text{kg} = 400\text{g}$

$1.7\text{kg} = 1700\text{g}$

Year 6 Spring 1 Maths Activity Mat 2

Section 1

What is the value of the digit in the ten thousands place in the number 7 291 726?

Section 2

A theatre sells 2019 tickets. There are adult and child tickets. 513 less adult tickets than child tickets are sold. How many child tickets are sold?

Section 3

Calculate:

$$13 \overline{)4199}$$

Section 4

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

$\frac{13}{4}$

$\frac{5}{2}$

$\frac{23}{6}$

$\frac{11}{3}$

$\frac{7}{2}$

$\frac{21}{6}$

Section 5

Calculate:

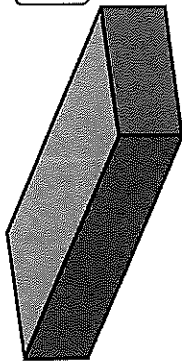
$0.05 \times 3 =$

$0.09 \times 2 =$

$0.04 \times 8 =$

Section 7

Name this shape.



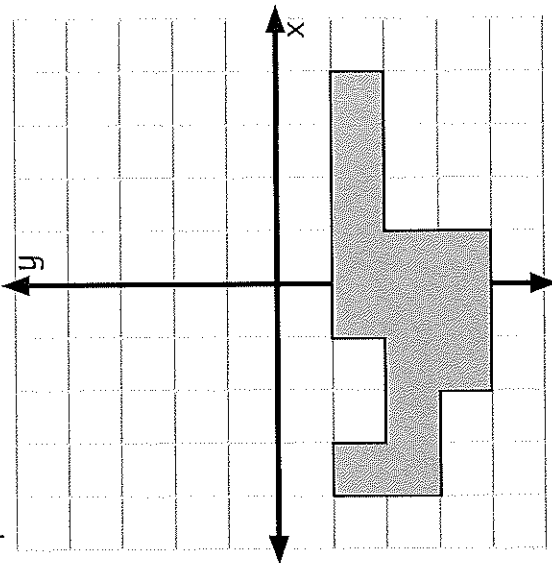
Section 6

5 miles is 8km.

How many miles in 176km?

Section 8

Reflect this shape about the x axis.



Year 6 Spring 1 Maths Activity Mat 2 - Answers

Section 1

What is the value of the digit in the ten thousands place in the number 7 291 726?

90 000

Section 2

A theatre sells 2019 tickets. There are adult and child tickets. 513 less adult tickets than child tickets are sold. How many child tickets are sold?

1266

Section 3

Calculate:

$$\begin{array}{r} 323 \\ 13 \overline{)4199} \end{array}$$

Section 4

Use <, =, or > to compare these fractions.

$\frac{13}{4} >$

$\frac{5}{2}$

$\frac{23}{6} >$

$\frac{11}{3}$

$\frac{7}{2} =$

$\frac{21}{6}$

Section 5

Calculate:

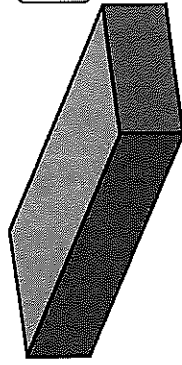
$0.05 \times 3 = 0.15$

$0.09 \times 2 = 0.18$

$0.04 \times 8 = 0.32$

Section 7

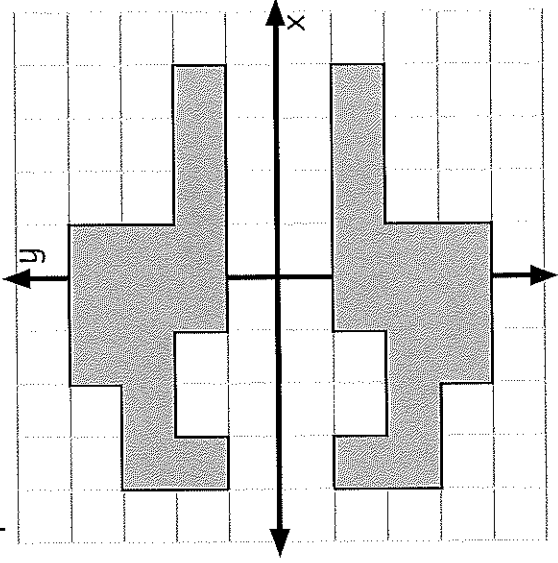
Name this shape.



cuboid

Section 8

Reflect this shape about the x axis.



Section 6

5 miles is 8km.

How many miles in 176km?

110 miles

Year 6 Spring 1 Maths Activity Mat 3

Section 1
Round the following numbers to the nearest 10 000 000.

16 500 000	<input type="text"/>
85 000 000	<input type="text"/>
44 489 301	<input type="text"/>

Section 2
Draw a Venn Diagram to show the common factors of 15 and 24.

Section 3
What number, when halved, is one sixth of 120?

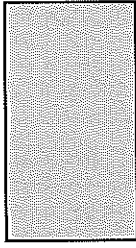
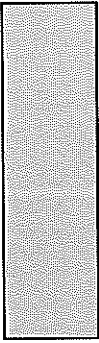
Section 4
Write two unit fractions that multiply to give $\frac{1}{6}$.

<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
				$\frac{1}{6}$

Section 5
Calculate, writing the answer as a decimal:

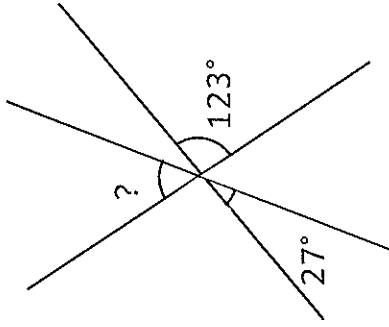
$$4 \overline{)673}$$

Section 6
What do you notice about the area and perimeter of these two rectangles?

*not to scale

Section 7
Calculate the unknown angle.



*not to scale

Section 8
Find three pairs of numbers that satisfy these equations:

$$2a + b = 13$$
$$2c - d = 8$$

Year 6 Spring 1 Maths Activity Mat 3 - Answers

Section 1

Round the following numbers to the nearest 10 000 000.

16 500 000

20 000 000

85 000 000

90 000 000

44 489 301

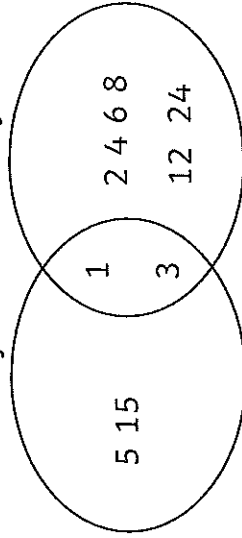
40 000 000

Section 2

Draw a Venn Diagram to show the common factors of 15 and 24.

Factors of 15

Factors of 24



Section 3

What number, when halved, is one sixth of 120?

40

Section 4

Write two unit fractions that multiply to give $\frac{1}{6}$.

$$\frac{1}{2} \times$$

$$\frac{1}{3} =$$

$$\frac{1}{6}$$

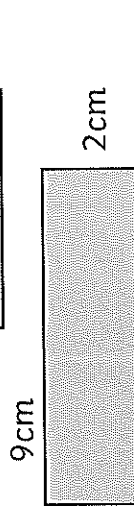
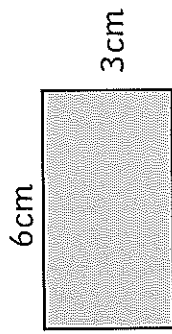
Section 5

Calculate, writing the answer as a decimal:

$$\begin{array}{r} 168.25 \\ 4 \overline{)673} \end{array}$$

Section 6

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

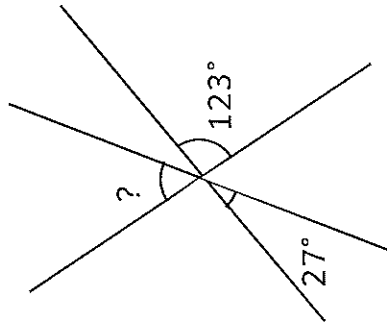


Same area 18cm^2 , different perimeter 22cm and 18cm

*not to scale

Section 7

Calculate the unknown angle.



30°

*not to scale

Section 8

Find three pairs of numbers that satisfy these equations:

$$2a + b = 13$$

$$2c - d = 8$$

$$a = 5, b = 3; a = 4, b = 5;$$

$$a = 3, b = 7; c = 5, d = 2;$$

$$c = 6, d = 4; c = 7, d = 6$$

Year 6 Spring 1 Maths Activity Mat 4

Section 1

At 8pm, the temperature is -1°C . At midday, the temperature had been 9°C warmer. At 6am, the temperature had been 12°C colder than it was at midday. What was the temperature at 6am?

Section 2

Calculate in your head:

$562 + 223 =$

$701 + 126 =$

$478 - 261 =$

$309 - 92 =$

Section 3

Calculate:

$12 \times (6 + 5) =$

$9 + 6 \times 7 =$

$(26 + 9) \div 7 =$

Section 4

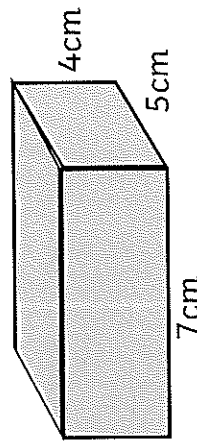
Write three fractions equivalent to $\frac{5}{8}$.

Section 5

Ella has 758 stamps in her stamp book, a further 67 to be stuck in, and is given another 178 by her grandfather. How many stamps does she have now, rounded to the nearest hundred?

Section 6

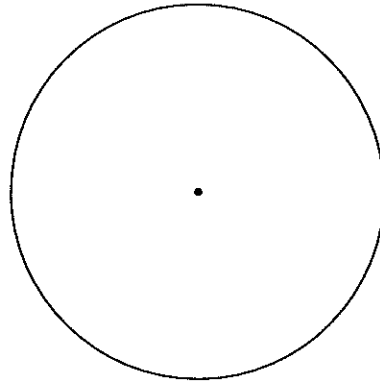
Calculate the volume of this cuboid.



*not to scale

Section 7

Draw and label the radius and the diameter of this circle.



Section 8

Find the mean of these numbers:

5, 18, 24, 13, 20

Year 6 Spring 1 Maths Activity Mat 4 - Answers

Section 1

At 8pm, the temperature is -1°C . At midday, the temperature had been 9°C warmer. At 6am, the temperature had been 12°C colder than it was at midday. What was the temperature at 6am?

Section 2

Calculate in your head:

$562 + 223 =$

$701 + 126 =$

$478 - 261 =$

$309 - 92 =$

Section 3

Calculate:

$12 \times (6 + 5) =$

$9 + 6 \times 7 =$

$(26 + 9) \div 7 =$

Section 4

Write three fractions equivalent to $\frac{5}{8}$.

Various answers such as,

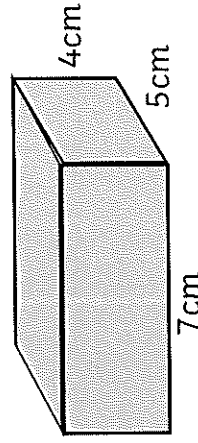
$\frac{10}{16}$ $\frac{15}{24}$

Section 5

Ella has 758 stamps in her stamp book, a further 67 to be stuck in, and is given another 178 by her grandfather. How many stamps does she have now, rounded to the nearest hundred?

Section 6

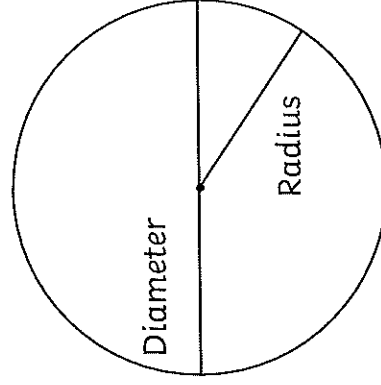
Calculate the volume of this cuboid.



*not to scale

Section 7

Draw and label the radius and the diameter of this circle.



Section 8

Find the mean of these numbers:

5, 18, 24, 13, 20

Year 6 Spring 1 Maths Activity Mat 5

Section 1
Use these clues to find the number:

- The number has six digits.
- The number has the same number of hundred thousands, thousands, hundreds and ones.
- The number of ten thousands plus the number of tens equals one tenth of the total of the rest of the digits.

Section 2

	3	1	9	7
x		2	5	
<hr/>				
<hr/>				

Section 3
A collector has 975 coins on display, 1076 coins in storage, and adds to the collection at an auction so the collection is now 2102 coins. How many coins did the collector buy at the auction?

Section 4
Calculate:

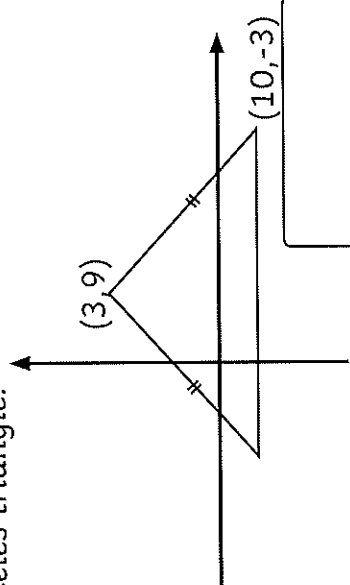
$\frac{1}{3} \div 3 =$

$\frac{7}{8} \div 3 =$

Section 5
75% of a class are going on a residential visit. What fraction are not going on the residential visit?

Section 6
1.5l of lemonade is mixed with 300ml cartons of juice to make a fruity cocktail drink. The drink is shared among nine children. How much does each child receive?

Section 7
Write the missing coordinates for this isosceles triangle.



Section 8
a and b are whole numbers between 7 and 13. Write all the calculations showing the possible values of a and b where: $2a + b = 28$

Year 6 Spring 1 Maths Activity Mat 5 - Answers

Section 1

Use these clues to find the number:

- The number has six digits.
- The number has the same number of hundred thousands, thousands, hundreds and ones.
- The number of ten thousands plus the number of tens equals one tenth of the total of the rest of the digits.

515 515

Section 2

			4	3	
	3	1	9	7	
x			2	5	
1	5	9	8	5	
6	3	9	4	0	
7	9	9	2	5	
	1			1	

Section 3

A collector has 975 coins on display, 1076 coins in storage, and adds to the collection at an auction so the collection is now 2102 coins. How many coins did the collector buy at the auction?

51 coins

Section 4

Calculate:

$$\frac{1}{3} \div 3 = \boxed{\frac{1}{9}}$$

$$\frac{7}{8} \div 3 = \boxed{\frac{7}{24}}$$

Section 8

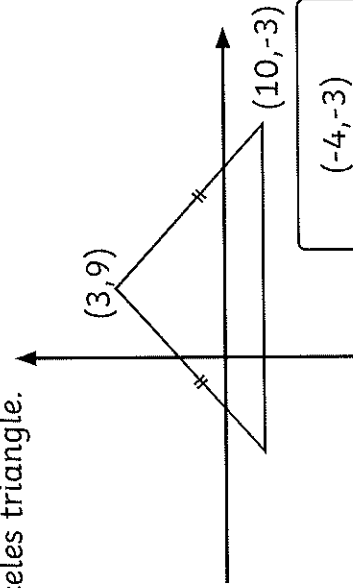
a and b are whole numbers between 7 and 13. Write all the calculations showing the possible values of a and b where: $2a + b = 28$

$$a = 8, b = 12; a = 9, b = 10;$$

$$a = 10, b = 8;$$

Section 7

Write the missing coordinates for this isosceles triangle.



(-4, -3)

Section 6

1.5l of lemonade is mixed with one 300ml carton of juice to make a fruity cocktail drink. The drink is shared among nine children. How much does each child receive?

200ml or 0.2l

Section 5

75% of a class are going on a residential visit. What fraction are not going on the residential visit?

$\frac{1}{4}$

Year 6 Spring 1 Maths Activity Mat 6

Section 1

A packet of pens has one red, two black and three blue pens. Muna needs eight black pens. How many red and blue pens will she get?

Section 2

$$y = 3x - 2$$

If $x = 4$, what is y ?

If $y = 19$, what is x ?

Section 3

Calculate

$$40\% \text{ of } £64 =$$

$$7\% \text{ of } £90 =$$

Section 4

Calculate:

$$\frac{2}{3} + \frac{1}{6} =$$

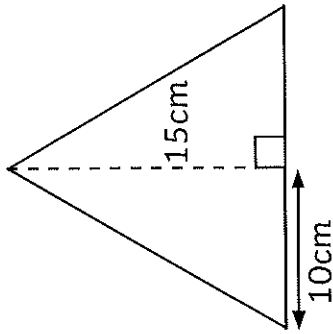
$$\frac{3}{10} - \frac{4}{15} =$$

Section 5

There are 42 people in a cinema. Coffee costs £2.40 and tea are £81, of which £33 was taken on tea. How many people drink coffee?

Section 6

Calculate the area of this triangle.



Section 7

Write the name of a regular shape with internal angles of 60° .

Section 8

Ishfaq has some pencils. 13 are freshly sharpened, six need sharpening and seven are brand new. Express the total number of pencils algebraically, using p to represent the total number of pencils.

Year 6 Spring 1 Maths Activity Mat 6 Answers

Section 1

A packet of pens has one red, two black and three blue pens. Muna needs eight black pens. How many red and blue pens will she get?

4 red

12 blue

Section 2

$$y = 3x - 2$$

10

If $x = 4$, what is y ?

7

If $y = 19$, what is x ?

Section 3

Calculate

$$40\% \text{ of } £64 = \boxed{£25.60}$$

$$7\% \text{ of } £90 = \boxed{£6.30}$$

Section 4

Calculate:

$$\frac{2}{3} + \frac{1}{6} = \boxed{\frac{5}{6}}$$

$$\frac{3}{10} - \frac{4}{15} = \boxed{\frac{1}{30}}$$

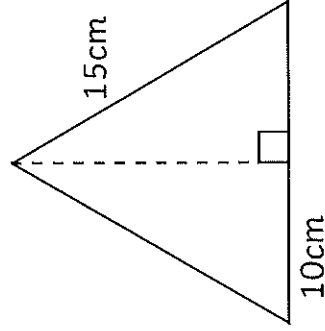
Section 5

There are 42 people in a cinema. Coffee costs £2.40 and tea £1.50. The takings are £81, of which £33 was taken on tea. How many people drink coffee?

20

Section 6

Calculate the area of this triangle.



150cm²

Section 7

Write the name of a regular shape with internal angles of 60°.

equilateral triangle

Section 8

Ishfaq has some pencils. 13 are freshly sharpened, six need sharpening and seven are brand new. Express the total number of pencils algebraically, using p to represent the total number of pencils.

$$p = 13 + 6 + 7$$