Year 6 Spring 1 Maths Activity Mat 1

Section 1

Order the following numbers from smallest to largest:

49 944 **44 949** **49 494** **44 499** **49 449**

smallest largest

Section 2

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

☐ 324 × 5 ≈ 1600

☐ 5069 + 2962 ≈ 7000

☐ 818 ÷ 4 ≈ 200

Section 3

A farmer picks 97 apples. He sells them in boxes of 12. How many boxes can he fill from the 97 apples?

☐

Section 4

Simplify the following fractions:

$\frac{2}{6}$ = ☐ $\frac{4}{8}$ = ☐

Section 5

Calculate:

0.3 × 10 = ☐

0.6 × 10 = ☐

0.5 × 10 = ☐

Section 6

Convert the following:

1kg = _____g

_____kg = 2000g

Section 7

Write a description of a cylinder.

_____

_____

_____

_____

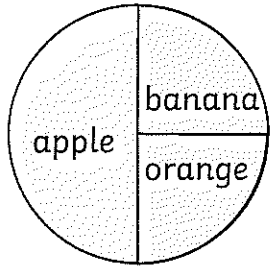
_____

_____

_____

Section 8

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



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

Apple ☐, Banana ☐, Orange ☐

Year 6 Spring 1 Maths Activity Mat 1 - Answers

Section 1

Order the following numbers from smallest to largest:

49 944	44 949	49 494	44 499	49 449

44 499	44 949	49 449	49 494	49 944

smallest largest

Section 2

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

- [x] 324 × 5 ≈ 1600
- [ ] 5069 + 2962 ≈ 7000
- [x] 818 ÷ 4 ≈ 200

Section 3

A farmer picks 97 apples. He sells them in boxes of 12. How many boxes can he fill from the 97 apples?

8

Section 4

Simplify the following fractions:

$\frac{2}{6} = \frac{1}{3}$ $\frac{4}{8} = \frac{1}{2}$

Section 5

Calculate:

0.3 × 10 = 3

0.6 × 10 = 6

0.5 × 10 = 5

Section 6

Convert the following:

1kg = 1000g

2kg = 2000g

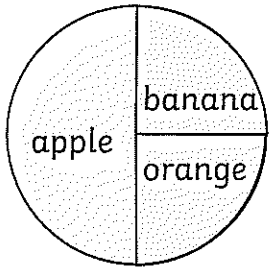
Section 7

Write a description of a cylinder.

A cylinder has two faces that are circles and a curved face that joins each circle face. One circle is at the base of the shape, with the other circle immediately above the base, parallel to the base. Between the circlular faces is a curved surface, with circular edges joining the two circle faces.

Section 8

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



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

Apple 16, Banana 8, Orange 8

Year 6 Spring 1 Maths Activity Mat 2

Section 1

What is the value of the digit in the thousands place in the number 806 564?

Section 2

A theatre sells 782 tickets. 393 are adult tickets, 214 are student tickets. The rest are child tickets. How many child tickets are sold?

Section 3

Calculate:

$8\overline{)5248}$

Section 4

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

$\frac{5}{3}$ ☐ $\frac{11}{6}$

$\frac{9}{8}$ ☐ $\frac{5}{4}$

$\frac{8}{5}$ ☐ $\frac{16}{10}$

Section 5

Calculate:

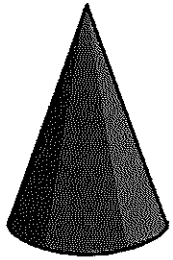
0.5 × 3 = ☐

0.7 × 2 = ☐

0.9 x 4 = ☐

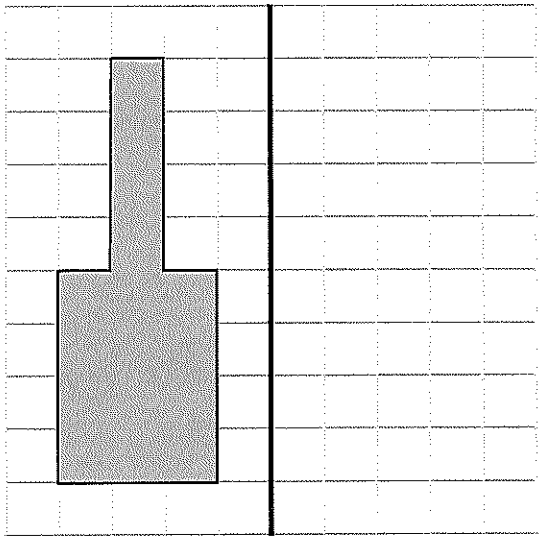
Section 7

Name this shape.



Section 8

Reflect this shape about the thick black vertical line.



Section 6

5 miles is 8km.

How many miles in 24km?

Year 6 Spring 1 Maths Activity Mat 2 - Answers

Section 1

What is the value of the digit in the thousands place in the number 806 564?

6000

Section 2

A theatre sells 782 tickets. 393 are adult tickets, 214 are student tickets. The rest are child tickets. How many child tickets are sold?

175

Section 3

Calculate:

$$8\overline{)5248} = 656$$

Section 4

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

$\frac{5}{3}$ < $\frac{11}{6}$

$\frac{9}{8}$ < $\frac{5}{4}$

$\frac{8}{5}$ = $\frac{16}{10}$

Section 5

Calculate:

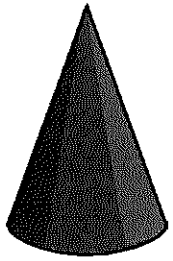
0.5 × 3 = 1.5

0.7 × 2 = 1.4

0.9 × 4 = 3.6

Section 7

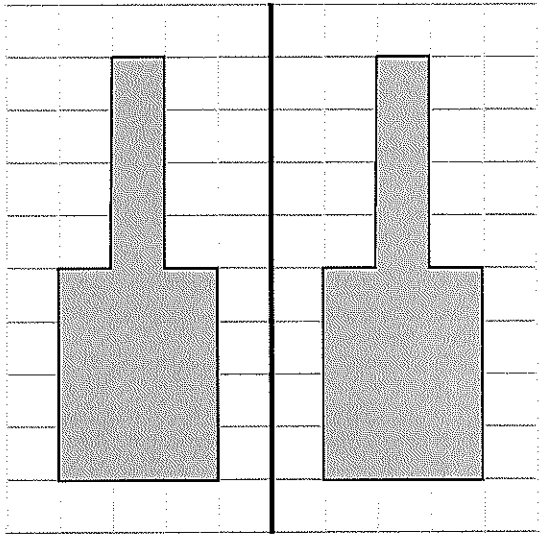
Name this shape.



cone

Section 8

Reflect this shape about the thick black vertical line.



Section 6

5 miles is 8km.

How many miles in 24km?

15 miles

Year 6 Spring 1 Maths Activity Mat 3

Section 1

Round the following numbers to the nearest 10 million.

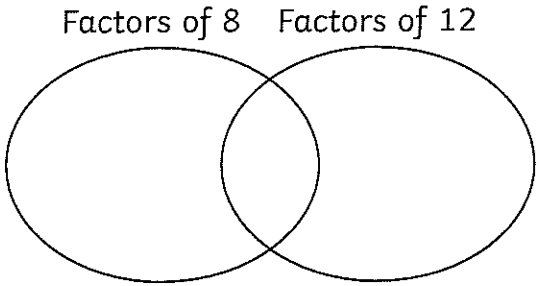
4 500 000 ☐

2478 375 ☐

7499 000 ☐

Section 2

Use this Venn Diagram to write the common factors of 8 and 12.



Section 3

Double a number is 42. What is the number?

☐

Section 4

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

☐ × ☐ = $\frac{1}{4}$

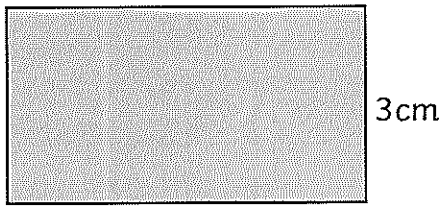
Section 5

Calculate, writing the answer as a decimal:

$4\overline{)146}$

Section 6

Calculate the area and perimeter of the following rectangle.



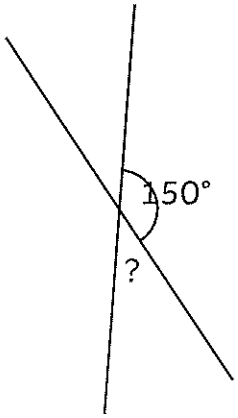
area = ☐

perimeter = ☐

*not to scale

Section 7

Calculate the unknown angle.



☐

*not to scale

Section 8

Find three pairs of numbers that satisfy these equations:

a - b = 5

c + d = 12

☐

Year 6 Spring 1 Maths Activity Mat 3 - Answers

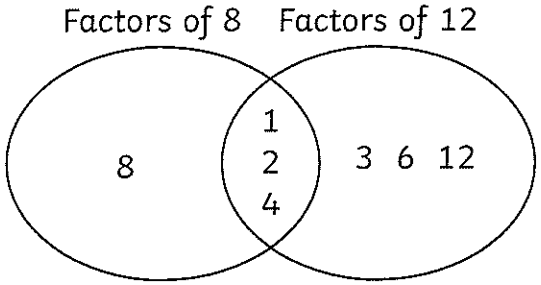
Section 1

Round the following numbers to the nearest 10 million.

4 500 000	5 000 000
2478 375	2 000 000
7499 000	7 000 000

Section 2

Use this Venn Diagram to write the common factors of 8 and 12.



Section 3

Double a number is 42. What is the number?

21

Section 4

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

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

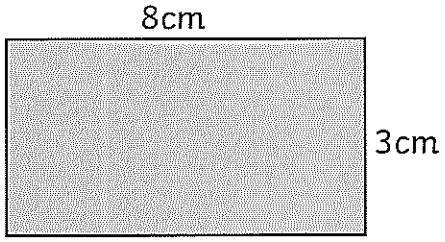
Section 5

Calculate, writing the answer as a decimal:

$$4\overline{)146} = 36.5$$

Section 6

Calculate the area and perimeter of the following rectangle.



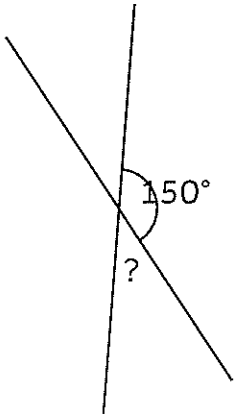
area = 24cm²

perimeter = 22cm

*not to scale

Section 7

Calculate the unknown angle.



30°

*not to scale

Section 8

Find three pairs of numbers that satisfy these equations:

$a - b = 5$

$c + d = 12$

a = 6, b = 1; a = 7, b = 2;

a = 8, b = 3 c = 7, d = 5;

c = 8, d = 4; c = 9, d = 3

Year 6 Spring 1 Maths Activity Mat 4

Section 1

At 6am the temperature is -5°C. At 7pm the previous evening, the temperature was 11°C warmer. What was the temperature at 7pm?

Section 2

Calculate in your head:

42 + 35 =

37 + 29 =

67 – 44 =

93 – 56 =

Section 3

Calculate:

3× (6-4) =

4 + 7× 3 =

(5 + 11) ÷ 4 =

Section 4

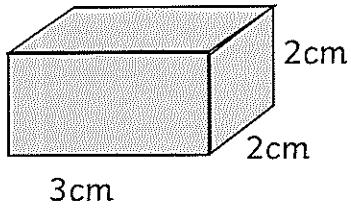
Write three fractions equivalent to $\frac{1}{2}$.

Section 5

Enoch has 376 stamps in his stamp book and 75 to be stuck in the book. How many stamps has he altogether rounded to the nearest hundred.

Section 6

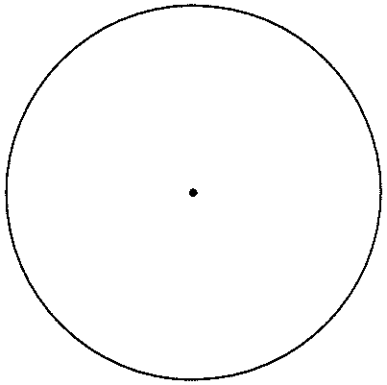
Calculate the volume of this cuboid.



*not to scale

Section 7

Draw the diameter of this circle.



Section 8

Find the mean of these numbers:

2, 10, 7, 13

Year 6 Spring 1 Maths Activity Mat 4 - Answers

Section 1

At 6am the temperature is -5°C. At 7pm the previous evening, the temperature was 11°C warmer. What was the temperature at 7pm?

6°C

Section 2

Calculate in your head:

42 + 35 = 77

37 + 29 = 66

67 – 44 = 23

93 – 56 = 37

Section 3

Calculate:

3× (6-4) = 6

4 + 7× 3 = 25

(5 + 11) ÷ 4 = 4

Section 4

Write three fractions equivalent to $\frac{1}{2}$.

Various answers, such as:

$\frac{2}{4}$ $\frac{3}{6}$

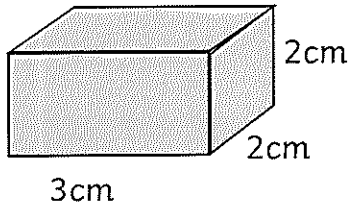
Section 5

Enoch has 376 stamps in his stamp book and 75 to be stuck in the book. How many stamps has he altogether rounded to the nearest hundred.

500

Section 6

Calculate the volume of this cuboid.

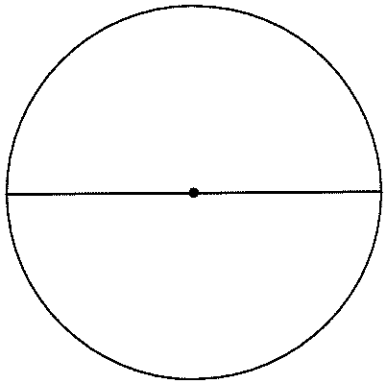


*not to scale

12cm^3

Section 7

Draw the diameter of this circle.



Section 8

Find the mean of these numbers:

2, 10, 7, 13

8

Year 6 Spring 1 Maths Activity Mat 5

Section 1

Use these clues to find the number:

- It is less than 1000.
- All the digits are even.
- The hundreds digit is half the tens digit.
- The ones digit is half way between the tens and hundreds digits.

Section 2

	1	2	5	8
×			1	4

Section 3

A collector has 387 coins on display, 298 coins in storage and buys a further 38 coins at an auction. How many coins does the collector have altogether?

Section 4

Calculate:

$\frac{1}{4} \div 2 =$

$\frac{1}{2} \div 5 =$

Section 5

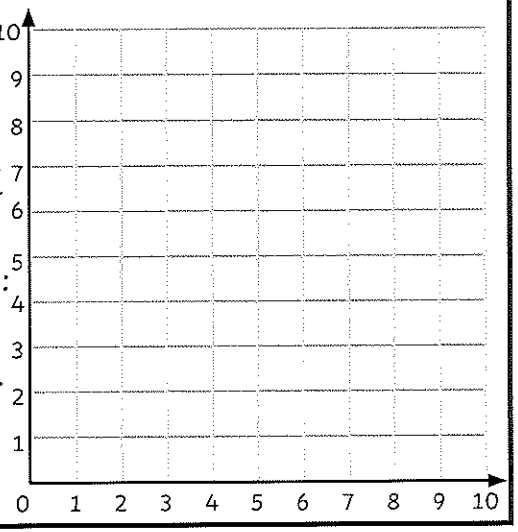
25% of a class sing in the choir. What fraction of the class sing in the choir?

Section 6

Two litres of juice is shared among eight people. How much juice do they each receive?

Section 7

Draw a rectangle on this grid using the coordinates: (4,2) (9,2) (4,9) (9,9).



Section 8

a and b are whole numbers between 6 and 12. Write all the calculations showing the possible values of a and b where: a+ b = 18

Year 6 Spring 1 Maths Activity Mat 5 - Answers

Section 1

Use these clues to find the number:

- It is less than 1000.
- All the digits are even.
- The hundreds digit is half the tens digit.
- The ones digit is half way between the tens and hundreds digits.

486

Section 2

	1^{1}	2^{2}	5^{3}	8
×			1	4
	5	0	3	2
1	2	5	8	0
1	7	6	1	2

1

Section 3

A collector has 387 coins on display, 298 coins in storage and buys a further 38 coins at an auction. How many coins does the collector have altogether?

723

Section 4

Calculate:

$\frac{1}{4} \div 2 = \frac{1}{8}$

$\frac{1}{2} \div 5 = \frac{1}{10}$

Section 5

25% of a class sing in the choir. What fraction of the class sing in the choir?

$\frac{1}{4}$

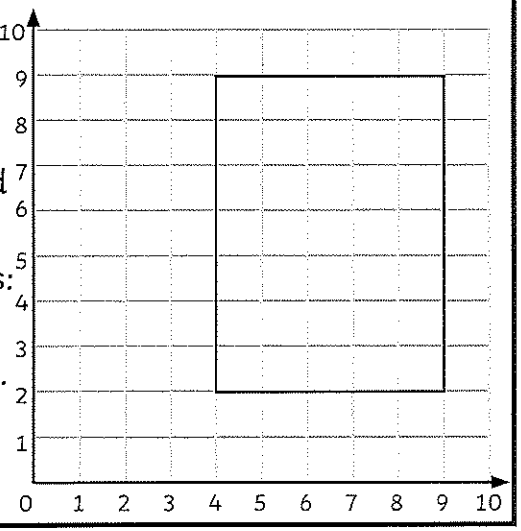
Section 6

Two litres of juice is shared among eight people. How much juice do they each receive?

250ml or 0.25l

Section 7

Draw a rectangle on this grid using the coordinates: (4,2) (9,2) (4,9) (9,9).



Section 8

a and b are whole numbers between 6 and 12. Write all the calculations showing the possible values of a and b where: a+ b = 18

a = 7, b = 11; a = 8, b = 10;
a = 9, b = 9; a = 10 b = 8;
a = 11 b = 7

Year 6 Spring 1 Maths Activity Mat 6

Section 1

A packet of pens has three red and five blue pens. Ali buys some packets of pens. There are 15 blue pens. How many red pens are there?

Section 2

$$y = x - 3$$

If x = 4, what is y?

If y = 7, what is x?

Section 3

Calculate

50% of £24 =

25% of £32 =

Section 4

Calculate:

$\frac{1}{4} + \frac{1}{2} =$

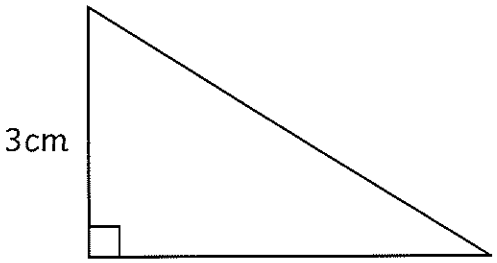
$\frac{4}{5} - \frac{3}{10} =$

Section 5

There are 11 people in a cafe. Coffee is £2 and tea is £1.50 The takings are £20, of which £6 was taken on tea. How many people drink coffee?

Section 6

Calculate the area of this right-angled triangle.



Section 7

Write the name of a regular shape with internal angles of 90°.

Section 8

Majid has some pencils. Nine are freshly sharpened, but 6 need sharpening. 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 three red and five blue pens. Ali buys some packets of pens. There are 15 blue pens. How many red pens are there?

9

Section 2

$y = x - 3$

If x = 4, what is y? 1

If y = 7, what is x? 10

Section 3

Calculate

50% of £24 = £12

25% of £32 = £8

Section 4

Calculate:

$\frac{1}{4} + \frac{1}{2} = \frac{3}{4}$

$\frac{4}{5} - \frac{3}{10} = \frac{5}{10}$ or $\frac{1}{2}$

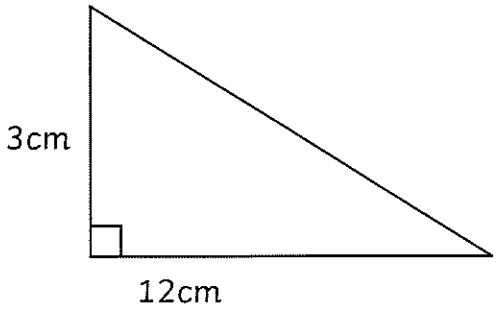
Section 5

There are 11 people in a cafe. Coffee is £2 and tea is £1.50 The takings are £20, of which £6 was taken on tea. How many people drink coffee?

7

Section 6

Calculate the area of this right-angled triangle.



18cm^2

Section 7

Write the name of a regular shape with internal angles of 90°.

square

Section 8

Majid has some pencils. Nine are freshly sharpened, but 6 need sharpening. Express the total number of pencils algebraically, using p to represent the total number of pencils.

p = 9 + 6