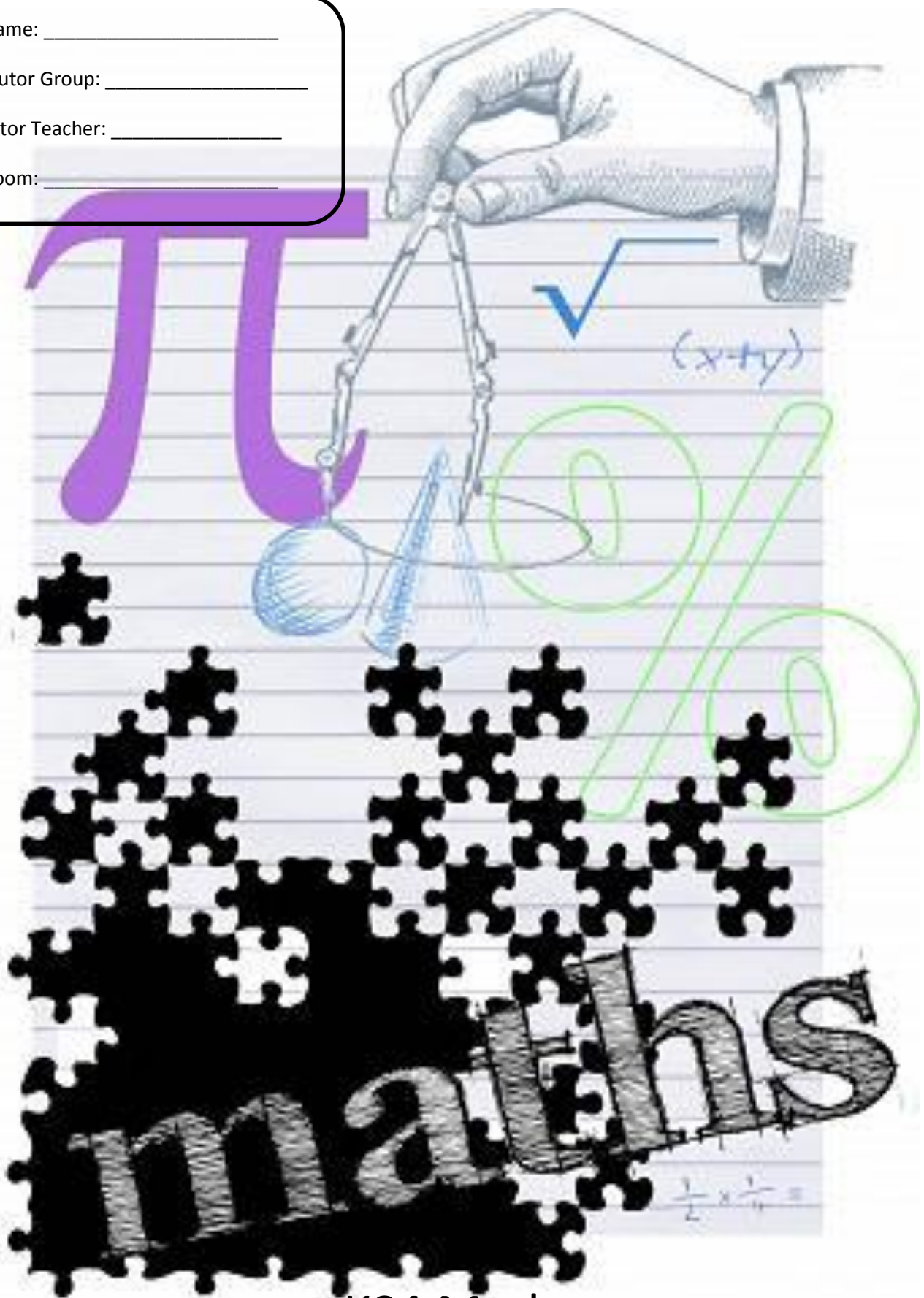


Name: \_\_\_\_\_

Tutor Group: \_\_\_\_\_

Tutor Teacher: \_\_\_\_\_

Room: \_\_\_\_\_



KS4 Maths

Morning Form Time by Miss D.Bartram

If you need to practise any topic areas please use MyMaths or see your class teacher.



Username: \_\_\_\_\_

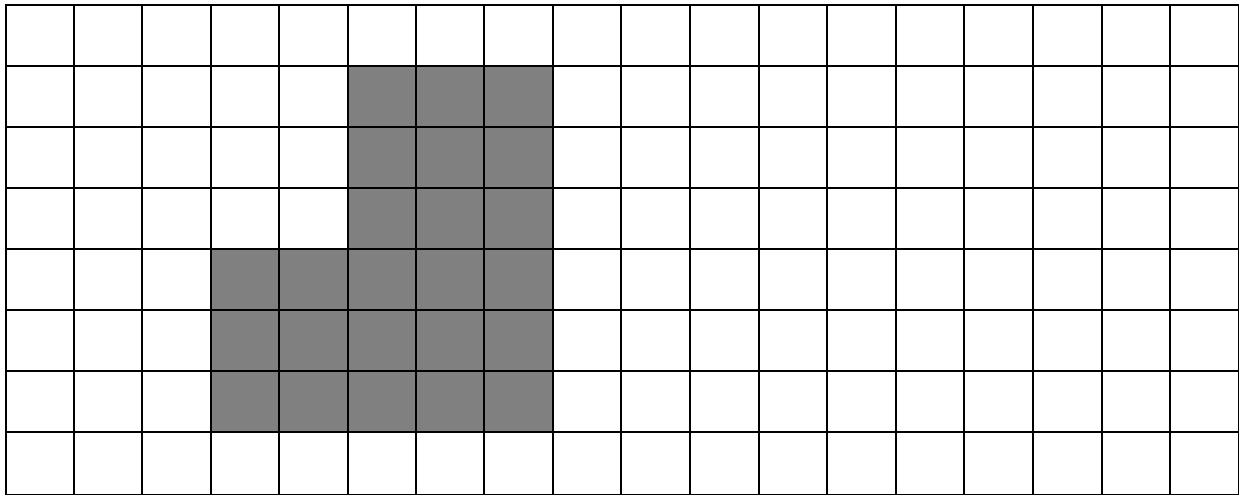
Password: \_\_\_\_\_

### Contents

Week	AFL	To improve ...
1	😊😊😊😊	
2	😊😊😊😊	
3	😊😊😊😊	
4	😊😊😊😊	
5	😊😊😊😊	
6	😊😊😊😊	
7	😊😊😊😊	
8	😊😊😊😊	
9	😊😊😊😊	
10	😊😊😊😊	
11	😊😊😊😊	
12	😊😊😊😊	
13	😊😊😊😊	
14	😊😊😊😊	
15	😊😊😊😊	
16	😊😊😊😊	
17	😊😊😊😊	
18	😊😊😊😊	
19	😊😊😊😊	
20	😊😊😊😊	

# Week 1

- 1) a) Find the area and perimeter of this shape drawn on centimetre square grid.



Area \_\_\_\_\_

Perimeter \_\_\_\_\_ (Remember your units of measure)

- b) On the grid draw a shape with the area of  $24\text{cm}^2$

- 2) a) write down the number 36780 in words

b) What is the value of the number 3 in 36780

c) Round to the 36780 to the nearest thousand

- 3) 8 9 13 15 17 24 25 32 42 48

a) Write down the prime number from the list above.

Mr Toor crosses out all the multiples of 2 from the list. He then also crosses out all the multiples of 3 from the list.

b) How many numbers did Mr Toor cross out?

c) How many numbers did Mr Toor not cross out?

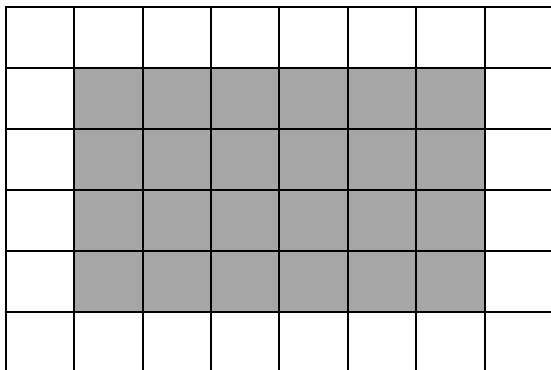
## Week 2

2   18   24   25   27   32   64

1) From the list above

- a) What is a multiple?
  
- b) Name a number that is a multiple of 9
  
- c) Name a number that is a factor of 48
  
- d) Name a square number
  
- e) Name a prime number

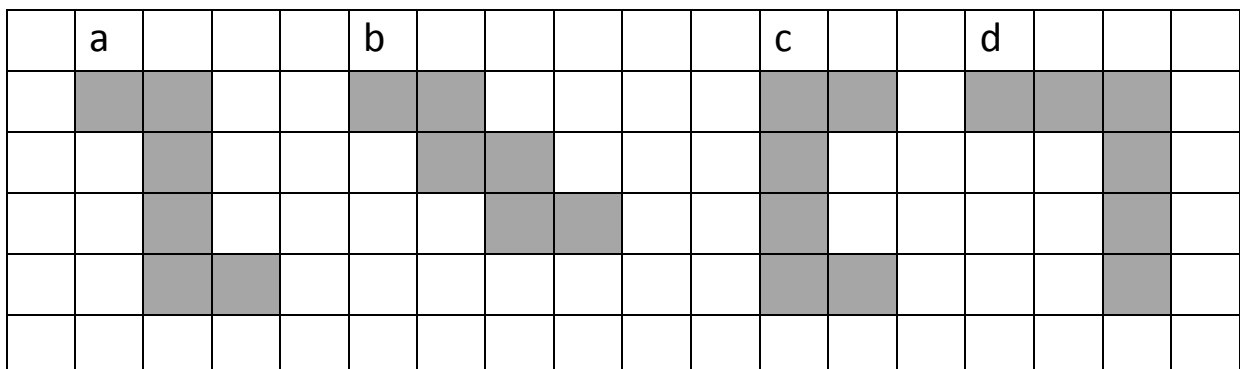
2) Using the image below



- a) Name the shape
  
- b) What is the order of rotational symmetry of this shape?
  
- c) Draw and label a vertical line of symmetry
  
- d) Draw and label a horizontal line of symmetry

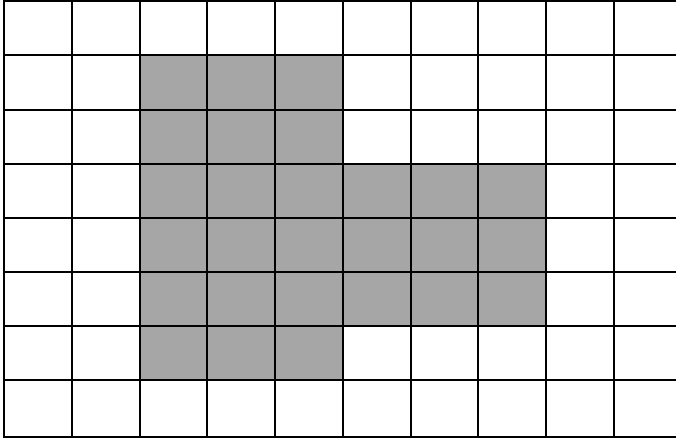
e) What fraction is shaded?

3) Which of these nets will make a cube?



## Week 3

4) Find the area and perimeter of this shape drawn on centimetre square grid.



- a) Area \_\_\_\_\_  
 b) Perimeter \_\_\_\_\_  
 (Remember your units of measure)

one square is equal to  $1\text{cm}^2$

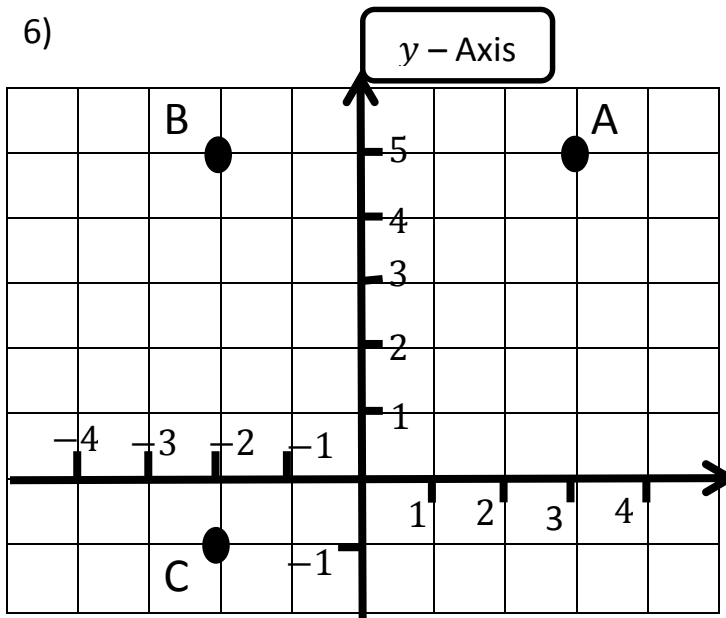
b) What fraction is shaded?

5) a) write down the number 39450 in words

b) What is the value of the number 9 in 39450

c) Round to the 39450 to the nearest thousand

6)



Name the co-ordinates of

a) Point A (\_\_, \_\_)

b) Point B (\_\_, \_\_)

c) Point C (\_\_, \_\_)

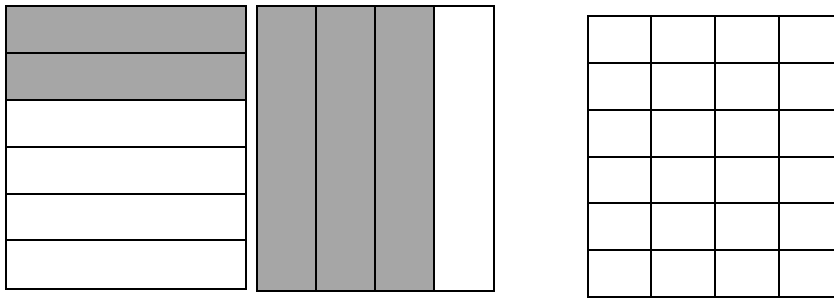
x - Axis

d) ABCD is a rectangle, plot point D and draw the rectangle

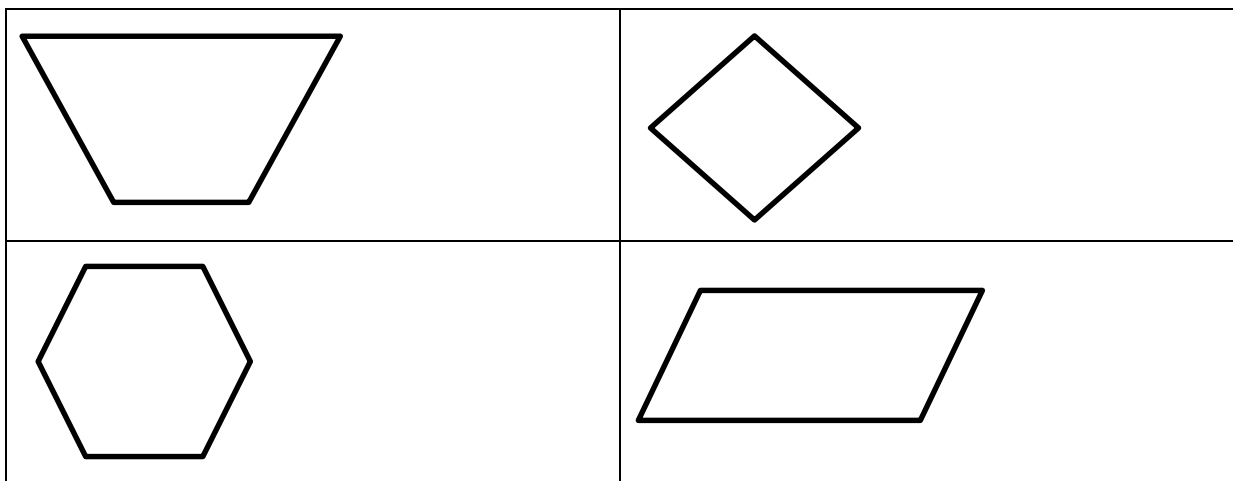
e) What are the co-ordinates of point D?

# Week 4

1) a) What fraction is shaded in the following shapes?



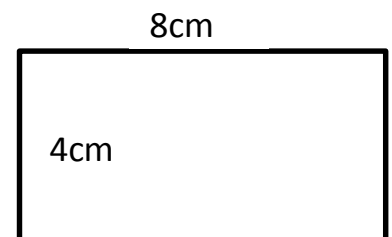
2) Name the following shapes



3) Below is a distance chart (Measured in miles). Fill in the gaps

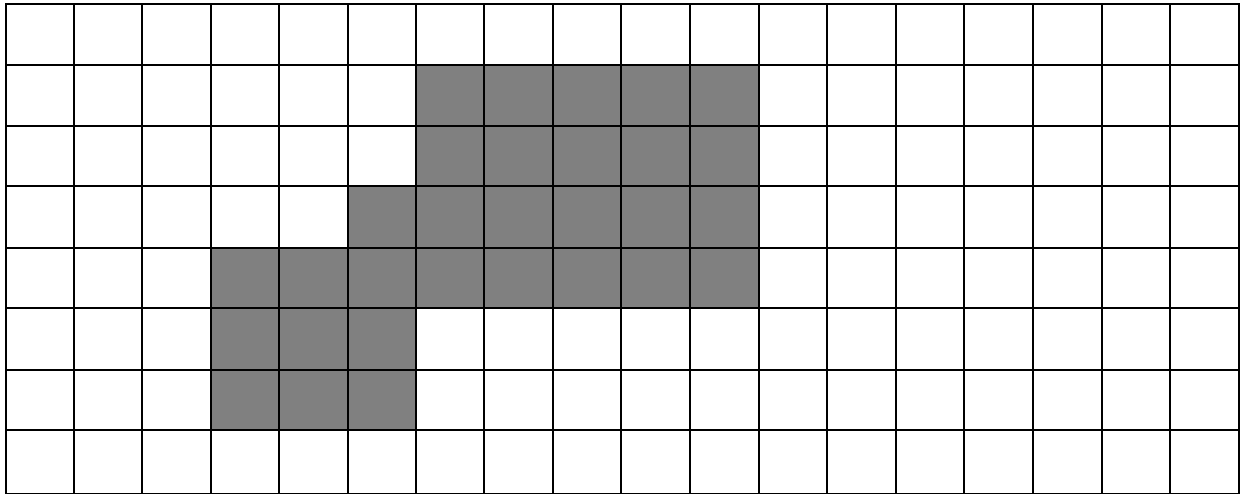
Darlington				
15	Billingham			
45	30	Sunderland		
		20	Newcastle	
165			100	Edinburgh

- 4) a) What is perimeter?
- b) What is area?
- c) Find the perimeter and area of the following shape.  
Perimeter \_\_\_\_\_  
Area \_\_\_\_\_
- d) What is the shape?



## Week 5

1) Find the area and perimeter of this shape drawn on centimetre square grid.



Area \_\_\_\_\_

Perimeter \_\_\_\_\_

(Remember your units of measure)

2) 8 5 11 16 19 21 24 35 48

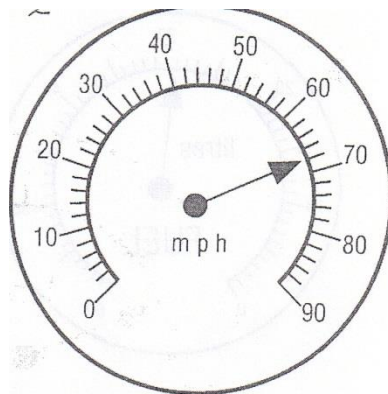
a) Write down the prime number from the list above.

Mr Godfrey crosses out all the multiples of 4 from the list. He then also crosses out all the multiples of 5 from the list.

b) How many numbers did Mr Godfrey cross out?

c) How many numbers did Mr Godfrey not cross out?

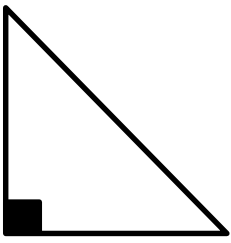
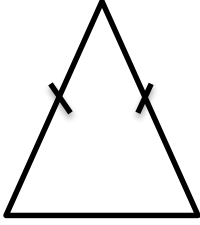
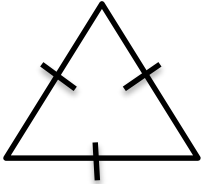
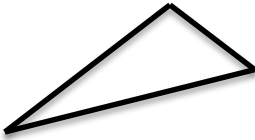
3) Write down the number shown by the arrow.



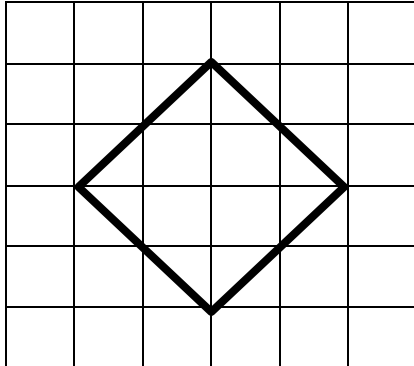
# Week 6

1) Identify each triangle and one property of each.

(Property – How would you describe the object to a blind person)

	<p>Name</p> <p>Property</p>		<p>Name</p> <p>Property</p>
	<p>Name</p> <p>Property</p>		<p>Name</p> <p>Property</p>

2) Using the image below

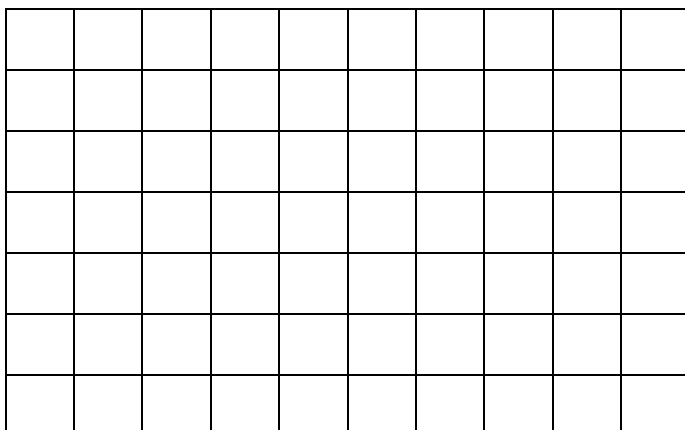


a) Name the shape

b) What is the order of rotational symmetry of this shape?

c) How many lines of symmetry does this shape have?

d) Draw a line of symmetry



3) a) What is perimeter?

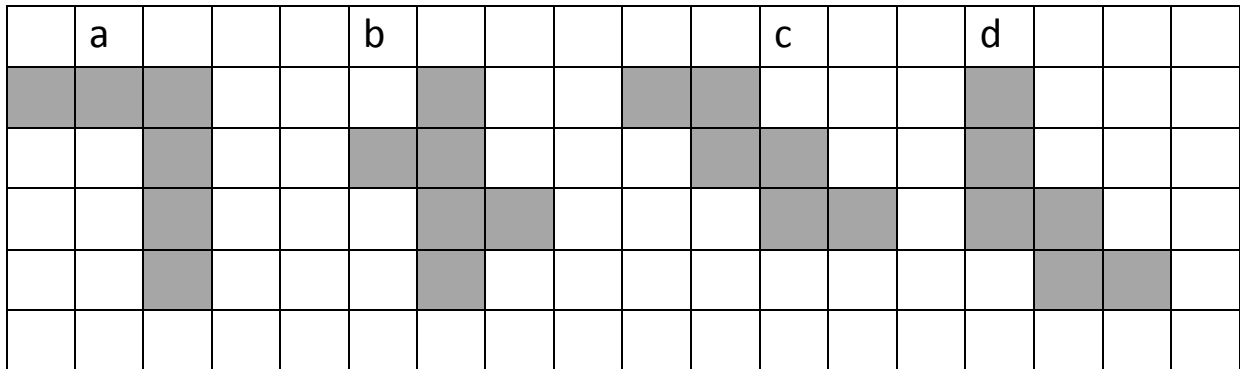
b) Draw a shape on the centimetre square grid with a perimeter of 24cm

c) What is the area of the shape you have drawn?



# Week 7

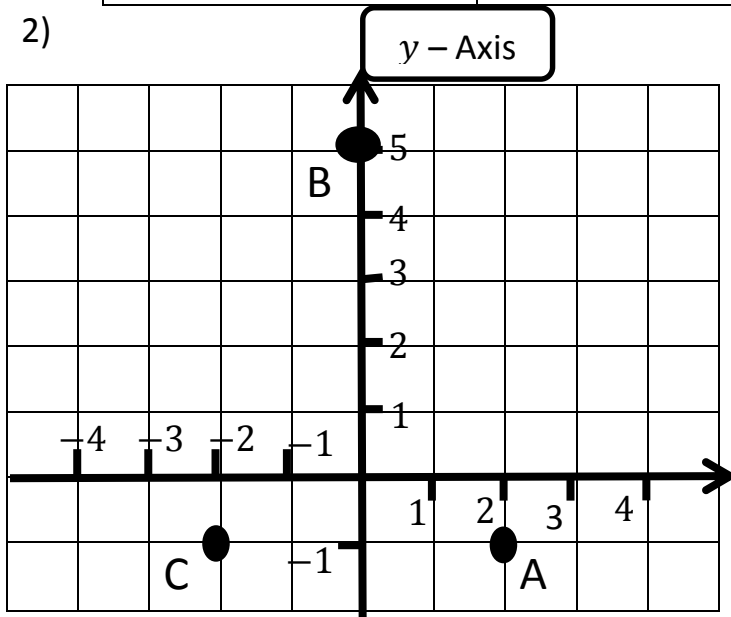
1) a) Which of these nets will make a cube?



b) What is the area and perimeter of

Net	Area	Perimeter
A	$\text{CM}^2$	$\text{CM}$
B	$\text{CM}^2$	$\text{CM}$
C	$\text{CM}^2$	$\text{CM}$
D	$\text{CM}^2$	$\text{CM}$

2)



Name the co-ordinates of

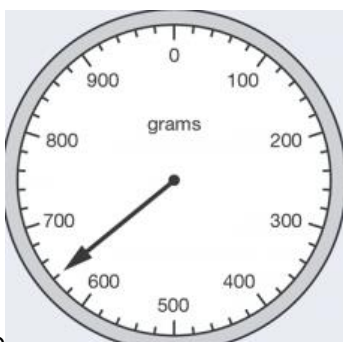
a) Point A (\_\_, \_\_)

b) Point B (\_\_, \_\_)

c) Point C (\_\_, \_\_)

d) The points ABC make a shape name the shape and connect the sides.

3) Write down the number shown by the arrow.



## Week 8

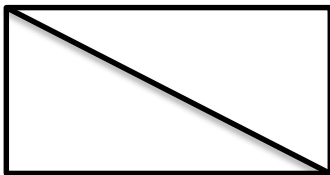
1) Simplify the following expressions

a) $4 \times a$	b) $3a + 2a$	c) $2 \times 3 \times a$	d) $8a - 3a$	e) $3e + 4d - 2e + 3d$
-----------------	--------------	--------------------------	--------------	------------------------

2) a) If the area of a rectangle is  $36\text{cm}^2$ . What lengths could the sides be?

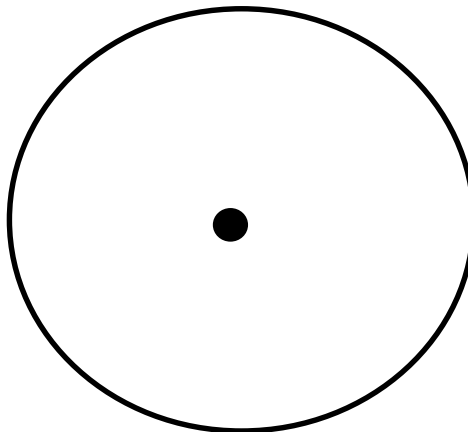


b) If I cut the rectangle into two equal sized triangles what would the area of each triangle be?



3) Draw and label the following on the circle.

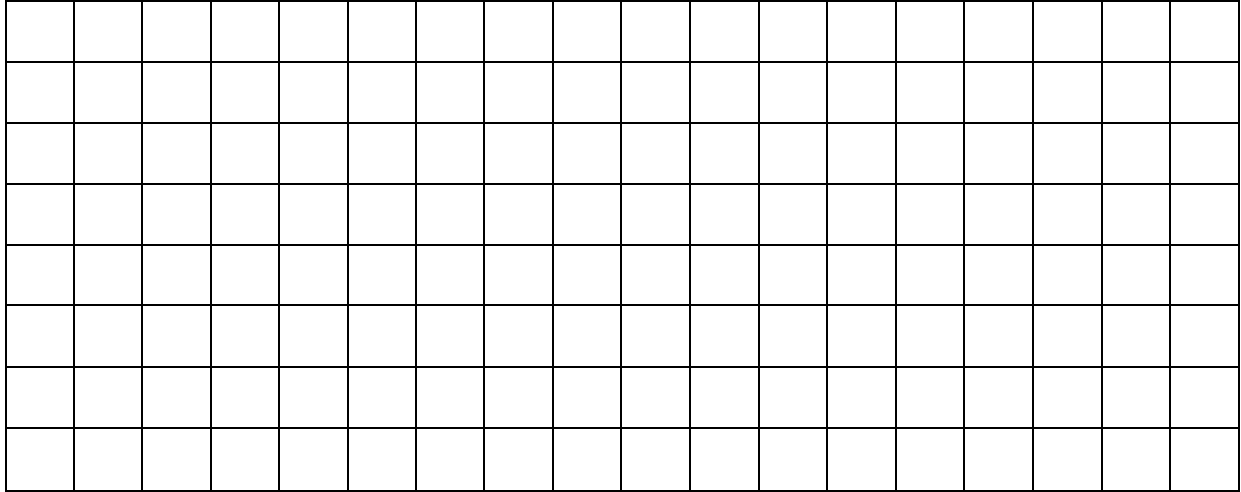
Tangent Chord Segment



4) Miss Gee needs to buy 40 hoodies for the Disneyland Paris trip. Each hoodie costs £15. She only has £400 to spend is this enough? Explain your answer.

## Week 9

1) ) Draw a shape on the centimetre square grid with a perimeter of 20cm



b) What is the area of the shape you have drawn?

2) a) write down the number 55861 in words

b) What is the value of the number 6 in 55861

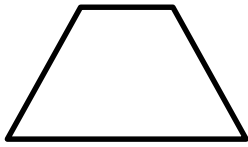
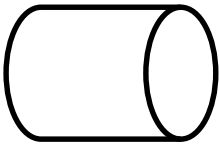
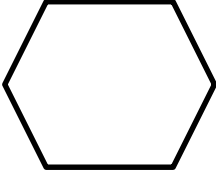

c) Round to the 55861 to the nearest thousand

3) Write down the number shown by the arrow.

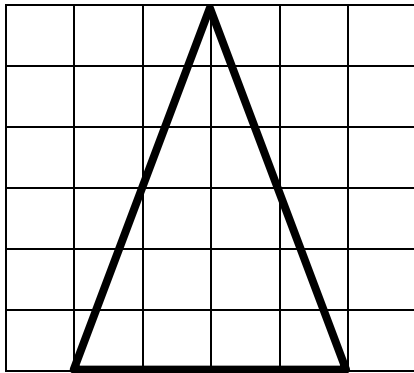


# Week 10

1) Name the shapes

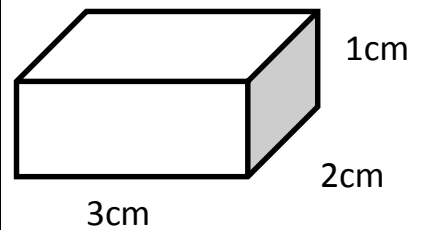
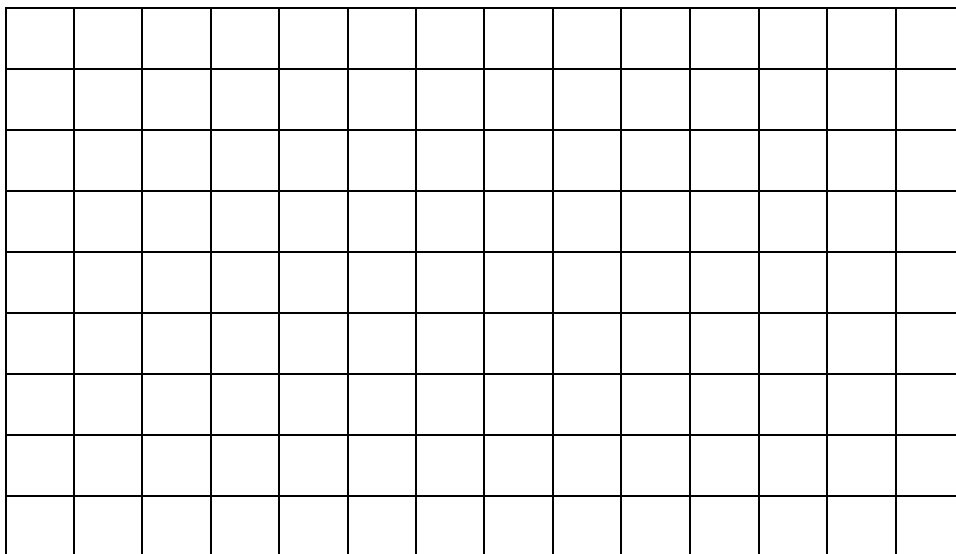
	Name		Name
	Name		Name

2) Using the image below



- Name the shape
- What is the order of rotational symmetry of this shape?
- How many lines of symmetry does this shape have?
- Draw and label line of symmetry

3) a) Draw the net of this cuboid on the centimetre square grid.



b) What is the volume?

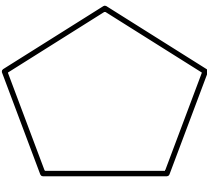
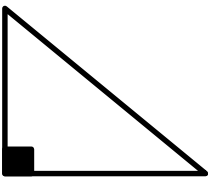
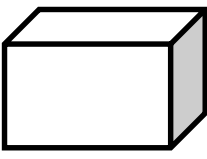
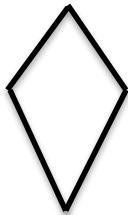
# Week 11

5 9 14 18 21 25 81


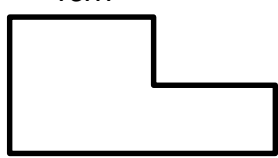

1) From the list above

- a) What is a factor?
  
- b) Name a number that is a multiple of 7
- c) Name a number that is a factor of 28
- d) Name a square number

2) Name the shapes

	Name		Name
	Name		Name

3) Find the area of and perimeter of the following shapes

 <p style="margin-left: 100px;">5cm</p> <p style="margin-right: 10px;">3cm</p>	<p>Area</p> <p>Perimeter</p>
 <p style="margin-left: 100px;">4cm</p> <p style="margin-left: 10px;">3cm</p> <p style="margin-right: 10px;">1cm</p> <p style="margin-left: 100px;">8cm</p>	<p>Area</p> <p>Perimeter</p>
 <p style="margin-left: 100px;"><math>2z + 4</math></p> <p style="margin-left: 10px;">3cm</p>	<p>(Write an expression for the)</p> <p>Area</p> <p>Perimeter</p>

# Week 12

1) Complete the following table

Fraction	Decimal	Percentage
$\frac{1}{2}$		50%
$\frac{1}{4}$	0.25	
	0.1	10%
$\frac{3}{10}$		
		1%

2)            6    9    11    15    17    21    24    35    40

a) What is a prime number?

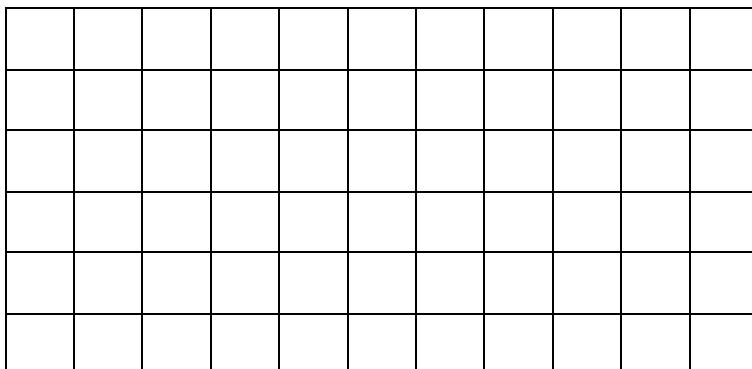
b) Write down the prime number from the list above.

Mr Godfrey crosses out all the multiples of 3 and 5 from the list.

c) How many numbers did Mr Godfrey cross out?

d) How many numbers did Mr Godfrey not cross out?

3) a) Draw a shape on the centimetre square grid with an area of 20cm<sup>2</sup>



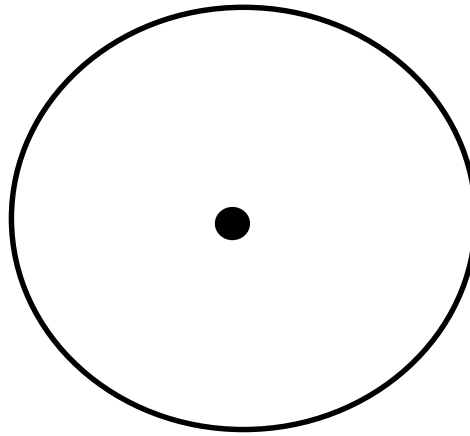
b) What is the perimeter of the shape you have drawn?

c) What fraction of the grid does your shape take up?

# Week 13

1) Draw and label the following on the circle.

Arc Diameter Sector Radius



2) Mr Walker buys four new computers for £1000.

a) How much does it cost for one computer?

b) How much would it cost for nine computers?

3) Complete these grid multiplication tables by filling in the gaps

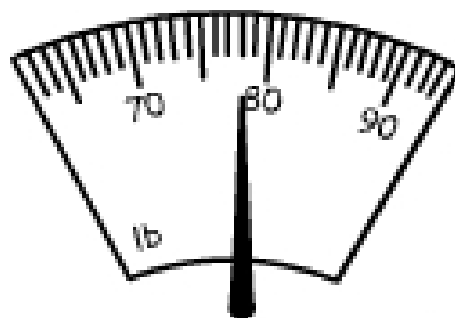
a)  $\underline{\quad} \times \underline{\quad} = \underline{\quad}$

	20	3
40	<input type="text"/>	<input type="text"/>
6	<input type="text"/>	<input type="text"/>

b)  $54 \times \underline{\quad} = \underline{\quad}$

	30	7
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

4) Read the following scale



$\underline{\quad}$  lbs

# Week 14

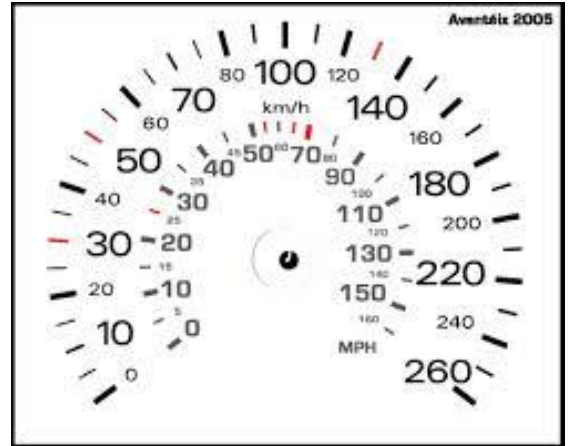
1) By using the speedometer below. Approximate

a) 70km/h into mph

b) 30mph into km/h

c) The speed limit in France is 80km/h.

Mr Ingram is driving at 60mph, is he speeding? Explain your answer.



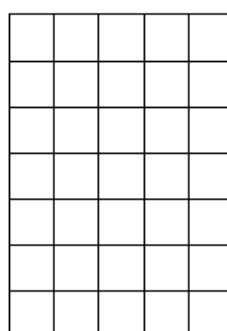
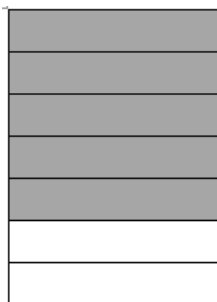
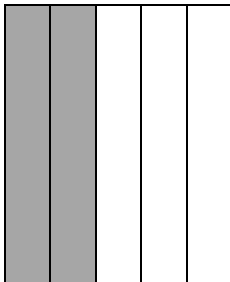
2) Mr Johnson needs to rent a van to transport all the maths textbooks from the Marsh house site to the Thames road site. He has 50 sets of books to transport, each set weighing 3kg.

a) How much do the books weight in total?

b) Mr Watton advises Mr Johnson the van can only take 70kg worth at a time. How many journeys will Mr Johnson have to make?

c) There is 1.5miles between the Thames road and Marsh house sites. How many miles will Mr Johnson travel in total. (He starts and finishes at the marsh house site)

3) a) What fraction is shaded in the following shapes?



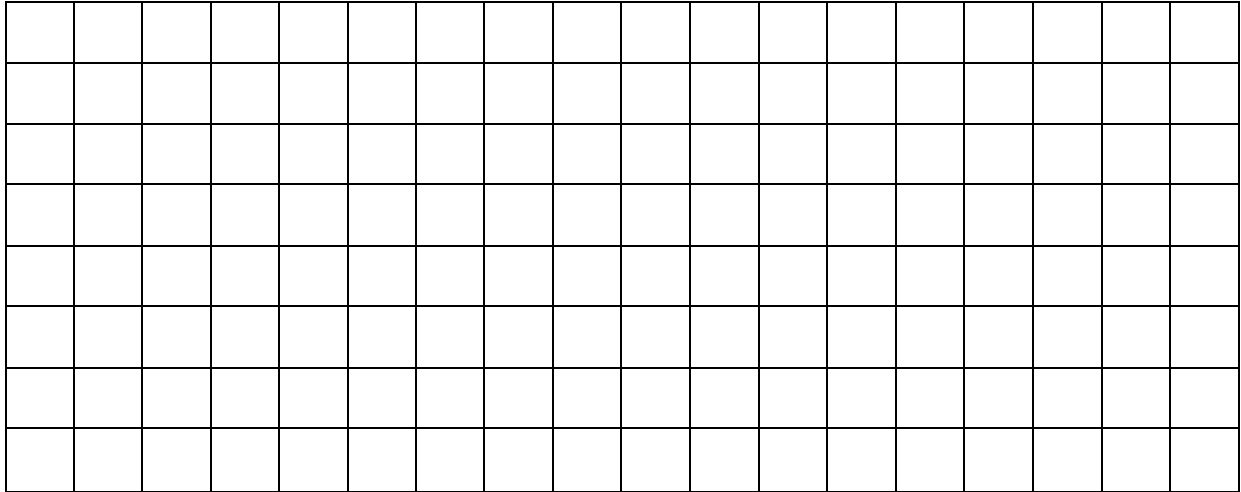
b) On the grid shade in an amount between shape A and shape B.

c) What is your fraction?



## Week 15

1) A) Draw a shape on the centimetre square grid with a perimeter of 24cm



b) What is the area of the shape you have drawn?

2) Mr Toor sells calculators for £6.20.

a) If Mr Toor sells 3 calculators. How much money has he earned?

b) Miss Baxter wants to buy 5 calculators to make up for those that pupils have not returned. She gives Mr Toor £30 is this enough?

Mr Toor also sells revision guides for £2.99

c) A student wants to buy a revision guide and a calculator, but only has £10 is this enough?

## Week 16

1) If  $x = 5$ ,  $y = 7$  and  $z = -2$  substitute into the following expressions. (swap the letters with the numbers and work out the answer)

a) $X + 6$	b) $3y$	c) $X + y$	d) $9 + z$
e) $yx$	f) $4x + 2z$	g) $X^2$	h) $xyz$

2) If chocolate bars cost £1.09 each and a can of pop cost 60p each.

- How much will it cost for 5 chocolate bars?
- How much will it cost for 3 chocolate bars and 2 cans?
- Mr Godfrey only has £5. Does he have enough to buy four chocolate bars and two cans? (Explain your answer fully)

3) There is 50 miles between Billingham and Newcastle. Durham is half way between Billingham and Newcastle.

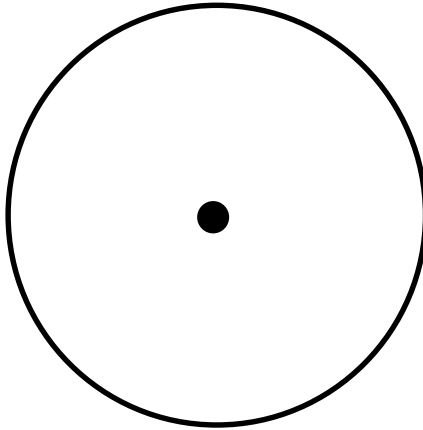


- How many miles is it from Billingham to Durham?
- Mr Toor and Mr Ingram go on a road trip to Newcastle. Mr Toor starts at Durham and goes to Billingham to pick Mr Ingram up from school. They both go to Newcastle and return to school on the same day. How many miles did
  - Mr Toor Travel
  - Mr Ingram Travel

## Week 17

Draw and label the circle below with the following properties

Diameter    Circumference    arc    tangent



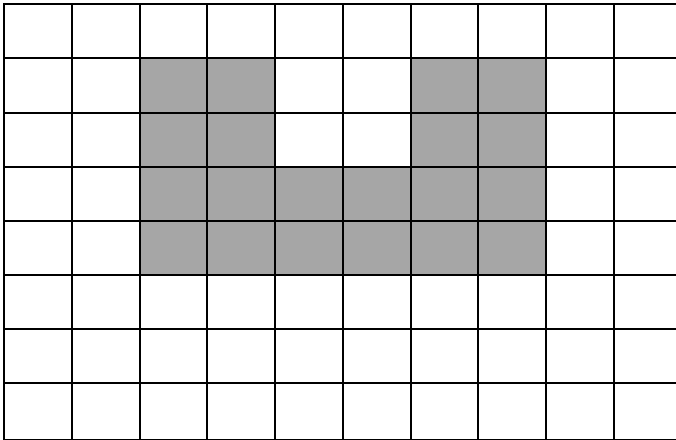
- 2) There is 400 miles between Billingham and Disney land Paris. The port dover is about half way between Billingham and Paris



- c) How many miles is it from Billingham to Dover?
- d) How many miles will it take to go from Billingham to Disney land and back to Dover?
- e) Mr Toor and Mr Ingram are going to Disney land, and can't wait to meet mickey mouse How long will it take them to get to Disney land if it takes 20 minutes to travel 5 miles.
- f) What speed are they traveling at?  
(Remember Speed, Distance and Time triangle)

# Week 18

1) Find the area and perimeter of this shape drawn on centimetre square grid.



- c) Area \_\_\_\_\_  
 b) Perimeter \_\_\_\_\_  
 (Remember your units of measure)

one square is equal to  $1\text{cm}^2$

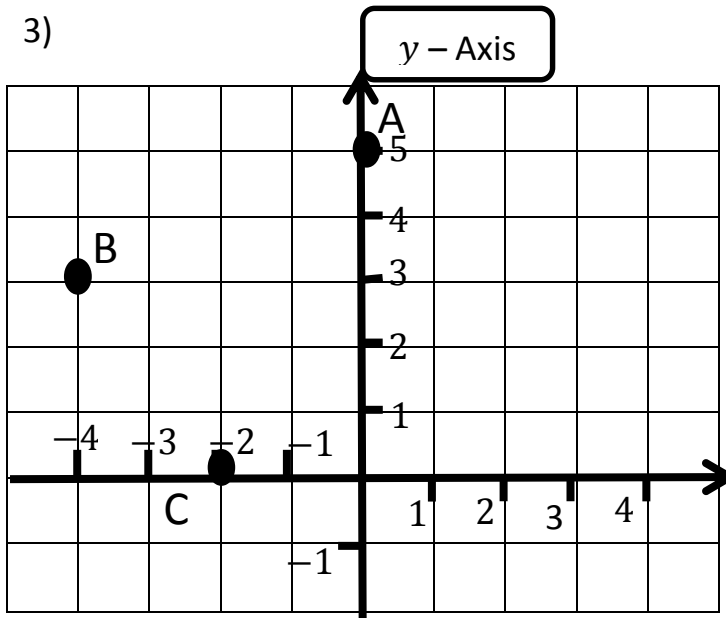
d) What fraction is shaded?

2) a) write down the number 19823 in words

b) What is the value of the number 8 in 19823

c) Round to the 39450 to the nearest thousand

3)



Name the co-ordinates of

f) Point A (\_\_, \_\_)

g) Point B (\_\_, \_\_)

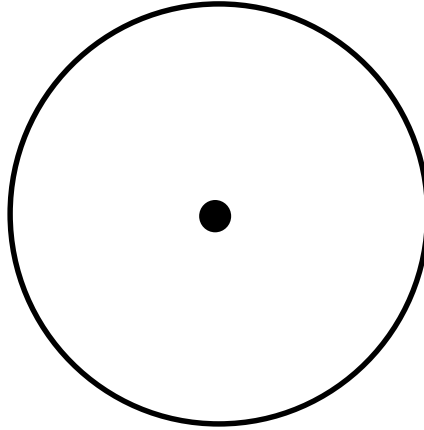
h) Point C (\_\_, \_\_)

ABCD is a rectangle, plot point D and draw the rectangle

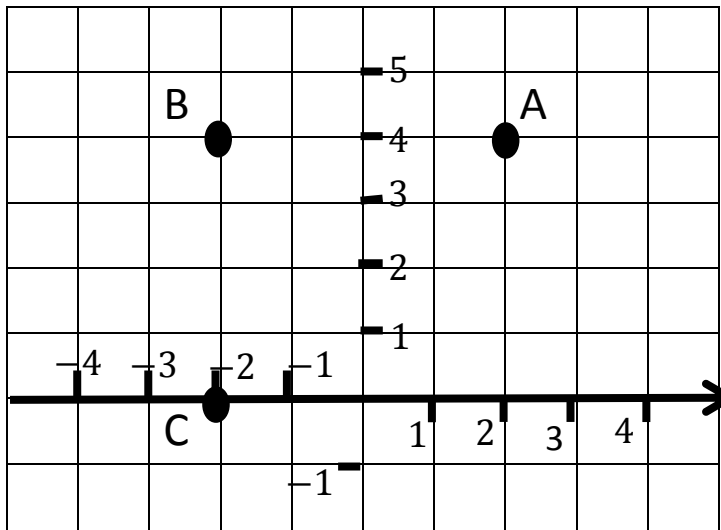
# Week 19

1) Draw and label the circle below with the following properties

Diameter    Radius    Chord    sector



2)



Name the co-ordinates of

a) Point A (\_\_, \_\_)

b) Point B (\_\_, \_\_)

c) Point C (\_\_, \_\_)

x - Axis

d) ABCD is a rectangle, plot point D and draw the rectangle

e) What are the co-ordinates of point D?

f) What fraction of the grid does your shape take up?

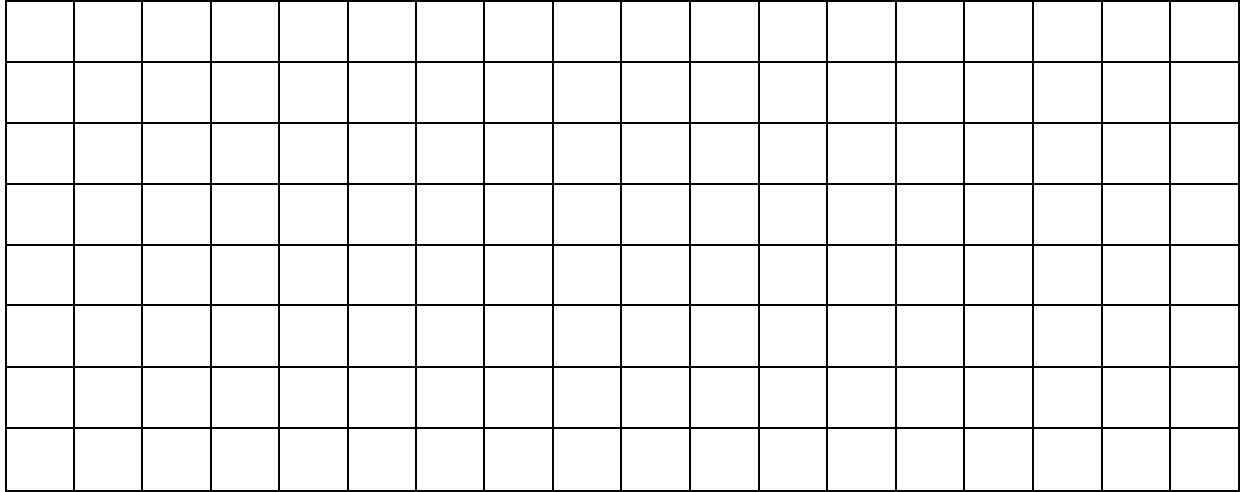
3) a) write down the number 57831 in words

b) What is the value of the number 7 in 57831

c) Round to the 57831 to the nearest thousand

## Week 20

- 1) A) Draw a shape on the centimetre square grid with a perimeter of  $12\text{cm}^2$



- b) What is the area of the shape you have drawn?
- 2) Mr Toor has had to increase the price of calculators from £6.20 to £6.99
- a) If Mr Toor sells 3 calculators now, how much money has he earned?
- b) How much extra is Mr Toor now making when he sells 3 calculators?

Mr Toor revision guide price has also increased from £2.99 to £3.50

- c) A student wants to buy a revision guide and a calculator, but only has £10  
is this enough with the new prices?