

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

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# HEROES TUITION

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November Homework  
Maths  
Numeracy

**Please return this booklet to your maths teacher by the end of the month.  
All answers will be sent to your parents or guardians, so please ensure it is marked before handing it in.**



# Heroes Tuition Centre - Homework

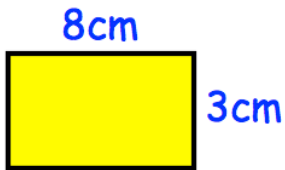
Name: \_\_\_\_\_

1st November

Numeracy

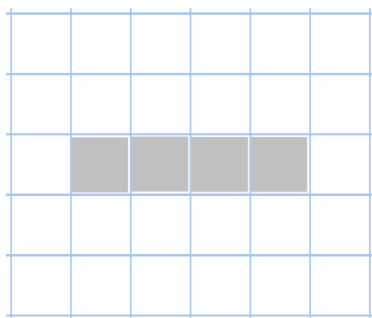
A minibus can hold 16 passengers.

How many passengers can travel in 9 minibuses?

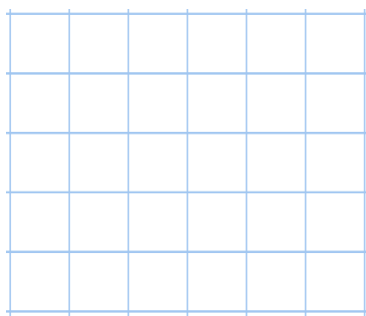


Find the perimeter of the rectangle.

Draw a 120 degree angle



Shade two more squares so that the shaded shape is a net of a cube.



Shade six more squares to create a different net of a cube.

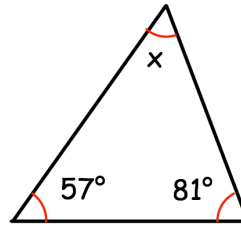
# Heroes Tuition Centre - Homework

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

**2nd November**

Work out  $-5 + 6$

Find  $x$



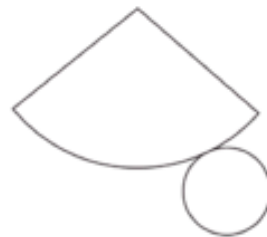
Write these numbers in order of size.  
Start with the smallest number.

0.507      0.75      0.5      0.078

Change 132cm into metres.

Change 98cm into metres.

Write down the shape that is made from  
this net.



# Heroes Tuition Centre - Homework

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

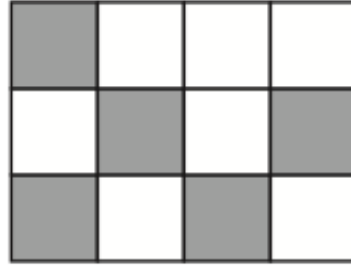
<b>3rd November</b>	
<p>Jennifer is paid £9 an hour. Kate is paid £8 an hour.</p> <p>On a Saturday, Jennifer works 5 hours and Kate works 6 hours.</p> <p>Who earns more?</p>	
<p>Write down the first five multiples of 8.</p>	<p>Write down all the factors of 60.</p>
<p>Work out</p> $120 - 10 \times 3^2$	
<p>A car park is open from 7am until 10pm.</p> <p>200 cars enter the car park between 7am and 9am.</p> <p><math>\frac{1}{4}</math> of these cars are red.</p>	<p>How many red cars enter the car park between 7am and 9am.</p>
<p>Another 63 cars enter the car park between 9am and 11am.</p> <p>Nathanael says <math>\frac{1}{2}</math> of these cars are red.</p> <p>Explain why he is wrong.</p>	

# Heroes Tuition Centre - Homework

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

**4th November**

What fraction of the shape is shaded?



Work out  $\sqrt{49}$

Calculate the perimeter of a rectangle that has length 13cm and width 4cm.

Work out  $\frac{2}{5}$  of 25

David runs for 420 seconds.

How many minutes is this?

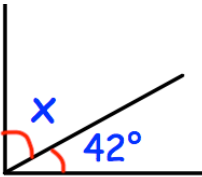
# Heroes Tuition Centre - Homework

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

**5th November**

Work out the product of 12 and 3

Work out the difference between 90 and 35



Find x

A footballer plays 20 matches in a season.  
In each match he plays 90 minutes.



Work out the total number of minutes he played.

**Raffle Tickets**  
40p each

Georgia sells 5 books of raffle tickets.  
There are 10 tickets in each book.

How much money does Georgia raise?

	France	Germany	Poland	Portugal	Spain
Medals won	34	44		1	17

The table shows how many medals were won in the 2012 olympics by 5 countries.

The total number of medals won by these countries was 106.

How many medals did Poland win?

# Heroes Tuition Centre - Homework

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

6th November							
Work out $3^2$	Work out $\sqrt{36}$						
Here is a list of numbers 12 18 23 49 50 21 Write down a prime number	Write down a square number						
Work out $5.7 - 3.62$							
Find the value of $115 \times 27$							
<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr></table> A card is picked at random	1	2	3	4	5	6	Write down the probability that the card is a number 5
1	2	3	4	5	6		

# Heroes Tuition Centre - Homework

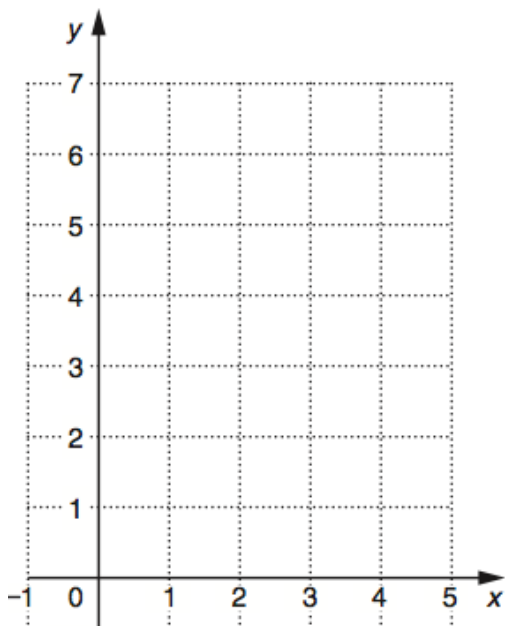
Name: \_\_\_\_\_

7th November

List the first five square numbers

Double 336

$$9.2 + 1.25 + 3.66$$



Plot the coordinate A (1, 3)

Plot the coordinate B (5, 5)

C is the midpoint of AB.

Write down the coordinates of C.

Complete the pictogram

Key ○ = £10

Tutor group	Raised
S	£50
T	£30
E	£15
P	£40



# Heroes Tuition Centre - Homework

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

**8th November**

Work out 50% of £40

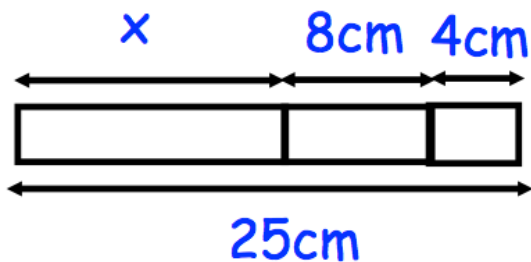
Work out 25% of 24cm

3 6 12 24

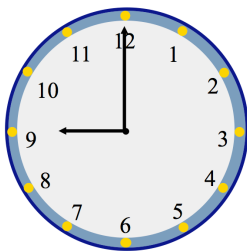
What is the rule for the sequence above?

What are the next two numbers?

How many days are there in four consecutive years?



Find x





Matt arrives at school at the time shown.

He left his house **twenty five minutes earlier**.

What time did he leave?

# Heroes Tuition Centre - Homework

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

9th November	
Work out $12^2$	
Write the number 17,082 in words.	
123 119 115 .... Write down the next two terms	22 cannot be a term in this sequence. Why?
Mrs O'Hagan gave her class a test. Two thirds of the class passed the test. There are 27 students in the class. How many failed the test?	
The probability of a football team winning a match is 80%. The probability of the team drawing is 13%	What is the probability of the team losing the match?

# Heroes Tuition Centre - Homework

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

**10th November**

List the first five multiples of 12.

Here is part of a bus timetable

	Departure times			
Newry	14:15	14:45	15:20	15:40
Banbridge	14:37	15:07	15:42	16:02
Dromore	14:48	15:18	15:53	16:13
Belfast	15:18	15:48	16:23	16:43

Niall gets the 14:45 bus at Newry and travels to Dromore.

What time should he arrive?

How long should his journey last?

Draw a shape with 4 lines of symmetry

Express 50p as a percentage of £10.

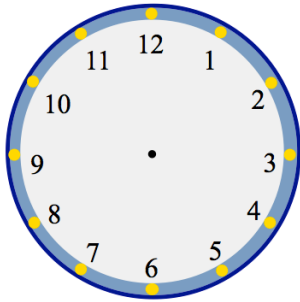
# Heroes Tuition Centre - Homework

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

**11th November**

Draw a hexagon

What is the name of a 7 sided shape?



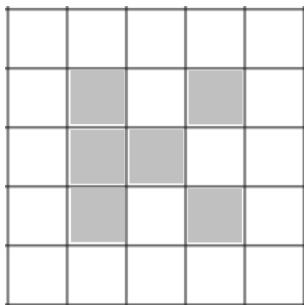
Show the time 4.25 on the clock

Seven pens cost £1.54  
Two pens and a ruler cost £1

What is the cost of one ruler?

Victoria thinks 33 is a prime number.

Explain why she is wrong.



Shade in one more square to make a pattern with 2 lines of symmetry.

# Heroes Tuition Centre - Homework

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

**12th November**

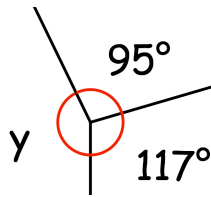
Work out 25% of 40

Work out 10% of 40

Three consecutive numbers add to 27.

What are they?

Find  $y$



## Menu

Tea	£1.55
Coffee	£2.80
Water	75p
Lemonade	95p
Hot Chocolate	£1.90
Milkshake	£2.65

Dave buys 3 bottles of water and a tea and a milkshake.  
He pays with a £20 note.

How much change will Dave get?

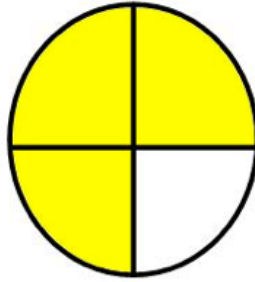
# Heroes Tuition Centre - Homework

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

**13th November**

What fraction of the shape is shaded?

What percentage of the shape is shaded?



What number is halfway between 7 and 8?

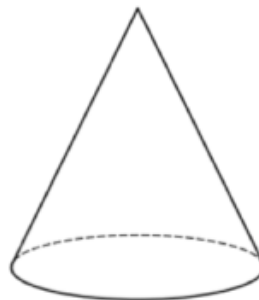
What number is halfway between 1.4 and 1.5?

.....% of 60 = 30

.....% of 60 = 15

154 x 27

What is the mathematical name of this solid?



# Heroes Tuition Centre - Homework

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

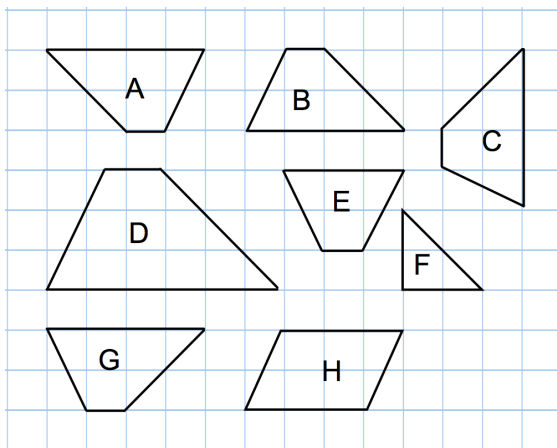
**14th November**

What number is halfway between 30 and 90?

What number is halfway between 20 and 70?

$$\square + \square = 22$$

square number    prime number



Name shape A

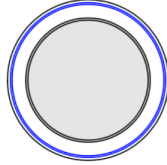
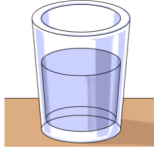

Write down the letters of the shapes which are congruent to shape A

Paul is a car salesman.  
He is paid £350 per week and £120 for every car he sells.

In one week, he sells 3 cars.  
How much is he paid that week?

# Heroes Tuition Centre - Homework

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

15th November									
Write 3 metres in centimetres	Write 0.7 metres in centimetres								
Which metric unit would you use to measure the following:	 The diameter of a plate.								
 The amount of water in a glass	 The weight of an airplane								
<table border="1" data-bbox="215 1317 454 1482"><tr><td>Burger</td><td>£4.50</td></tr><tr><td>Salad</td><td>£2.75</td></tr><tr><td>Chips</td><td>£2.85</td></tr><tr><td>Drink</td><td>£1.80</td></tr></table> Steve buys a burger, a salad and a drink.	Burger	£4.50	Salad	£2.75	Chips	£2.85	Drink	£1.80	How much change will he get from £10?
Burger	£4.50								
Salad	£2.75								
Chips	£2.85								
Drink	£1.80								
The temperatures in a city over a six days in December were:  1°C 3°C -2°C 0°C 4°C -8°C	Arrange the temperatures in order, starting with the warmest.								



# Heroes Tuition Centre - Homework

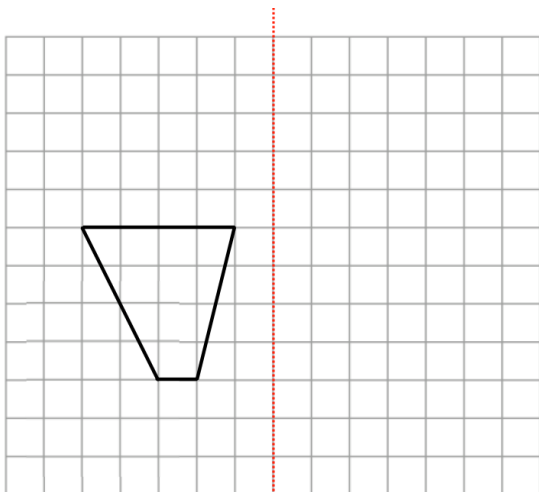
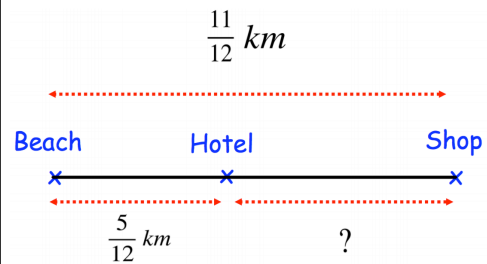
Name: \_\_\_\_\_

**16th November**

Draw a right angle

Draw a reflex angle

Find the distance from the hotel to the shop.



Name the shape drawn on the grid.

Reflect the shape in the mirror line

Write  $\frac{1}{8}$  as a decimal

Write  $\frac{1}{8}$  as a percentage

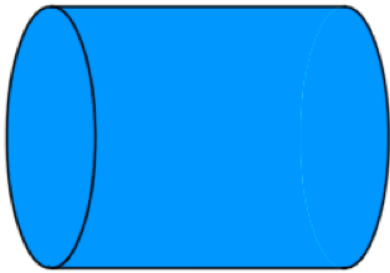
# Heroes Tuition Centre - Homework

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

17th November

Write down the value of digit 4.

3942

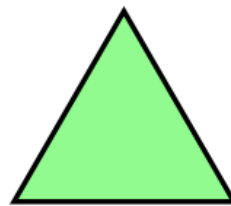


Name this solid

$$\frac{3}{15} = \frac{12}{\square}$$

$$\frac{12}{20} = \frac{\square}{5}$$


Shown is an equilateral triangle.  
Draw on any lines of symmetry.



5 friends share £18.20 equally.  
How much does each receive?

# Heroes Tuition Centre - Homework

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

18th November	
Write 3103 in words	Write two thousand and one in figures
Work out $11^2$	
Write 65% as a decimal.	Write 0.3 as a fraction
 <p>On a bus there are 35 passengers. Four-fifths of the passengers are right handed.</p>	How many passengers are right handed?
Jenny, Hannah, Greg and Paul share £512 equally.  How much do they each receive?	

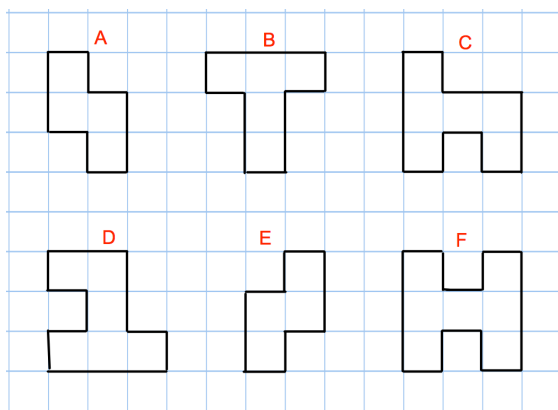
# Heroes Tuition Centre - Homework

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

19th November

Round 179.6 to the nearest whole number

Round 12.48 to the nearest whole number



Which shape is congruent to A?

Name two other congruent shapes.



Find the area of the square

Find the perimeter of the square

$$\frac{6}{11} + \frac{2}{11}$$

$$\frac{6}{11} - \frac{2}{11}$$

# Heroes Tuition Centre - Homework

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

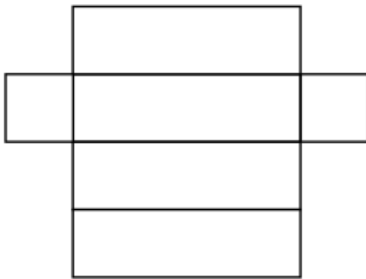
20th November

12 13 14 15 16 17 18

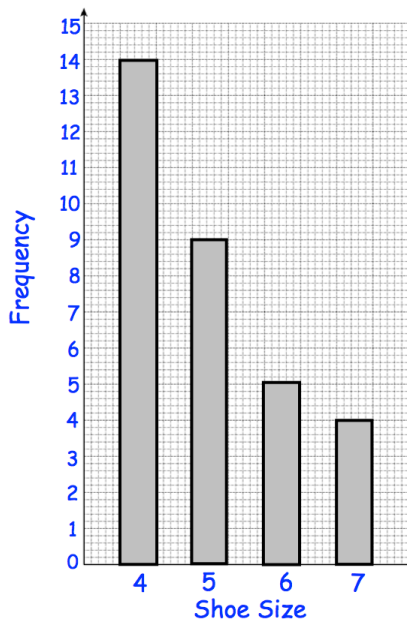
From the list:  
Write down a prime number

From the list:  
Write down a multiple of 8

From the list:  
the two numbers that have a sum of  
34.



This is the net for which solid?



How many students had a size 5 shoe?

How many students were in the class?

# Heroes Tuition Centre - Homework

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

**21st November**

Draw a shape with one line of symmetry

$$\begin{array}{r} 3 \square 4 \\ + 286 \\ \hline \square 4 \square \end{array}$$

In a class of 30 students, 12 are male.

What fraction of the class are male?

What fraction of the class are female?

How many seconds are in 12 minutes?


How many seconds are in 24 minutes?

The population of a country is 9 million.

Write 9 million in figures.

# Heroes Tuition Centre - Homework

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

22nd November	
Work out $111 + 231 + 109$	Work out 417 divided by 3.
Write down the first five multiples of 6.	Write down all the factors of 16.
What type of angle is shown? 	
List the square numbers between 10 and 50.	List the prime numbers between 30 and 40.
Ben buys a packet of 40 sweets. 25% of them are red. Work out 25% of 40	$\frac{3}{5}$ of them are green. Work out $\frac{3}{5}$ of 40.

# Heroes Tuition Centre - Homework

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

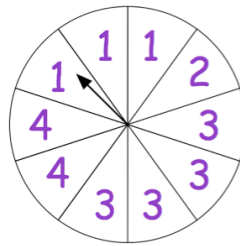
**23rd November**

Write the value of the 5 in the number

7563

Shown is a fair spinner.

What is the probability that the spinner lands on a 3?



Michelle is making chocolate cakes. Each cake needs 300g of chocolate. Michelle has 2.4kg of chocolate.

How many chocolate cakes can Michelle make?

$3894 + 124$

Write 0.017 as a fraction



# Heroes Tuition Centre - Homework

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

**24th November**

Find  $\frac{1}{3}$  of 18

Find  $\frac{4}{7}$  of 56

At a Bath Rugby match, there were 13,512 spectators.

Write 13,512 in words.

Karen says "*the product of an odd number and an even number is always even.*"

Show she is correct

Find 20% of 250

Write these in order, smallest first

0.06      $\frac{1}{2}$      4%     0.1

# Heroes Tuition Centre - Homework

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

25th November

Work out  $7 \times 23$

Work out  $1284 - 311$



Convert 8 centimetres into millimetres

Convert 120 millimetres into centimetres

Complete these fractions to make each equivalent to  $\frac{5}{6}$

$$\frac{15}{\square}$$

$$\frac{\square}{36}$$

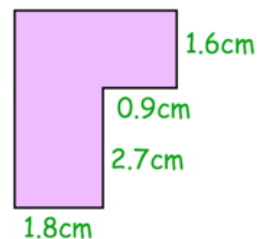
$$\frac{70}{\square}$$

Georgia buys 5 books.

Each book costs £7.49

How much money does she spend?

Find the perimeter of this shape.



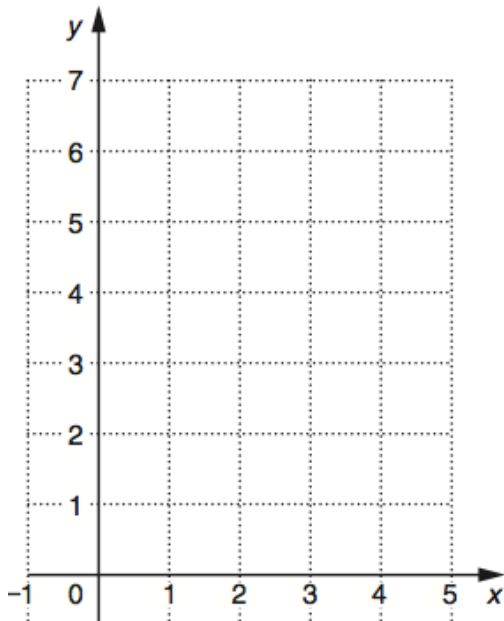
# Heroes Tuition Centre - Homework

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

26th November

Write 394 in words.

Write **twelve thousand and fourteen** in figures.



Plot the coordinate A (4, 3)

Plot the coordinate B (1, 7)

C is the midpoint of AB.

Write down the coordinates of C.

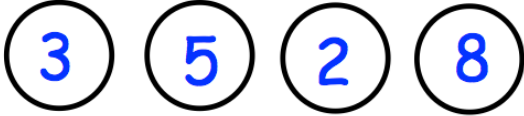
Write 50:400 as a ratio in its simplest form

The probability that a train is late is 0.3

What is the probability that the train is not late?

# Heroes Tuition Centre - Homework

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

27th November	
<p>A pen costs £2.65. Thomas pays with a £5 note.</p> <p>Work out how much change he should receive.</p>	
<p>Work out</p> $0.09 \times 100$	<p>Work out</p> $920 \div 1000$
<p></p> <p>Shown are four discs, each with a digit written on it.</p>	<p>Using all four digits shown, create the smallest possible four digit number.</p>
<p>Using all four digits shown, create the largest possible four digit number.</p>	<p>Using all four digits shown, create the smallest possible <b>odd</b> four digit number.</p>
<p>Work out 50% of £320</p>	<p>Work out 10% of £14</p>

# Heroes Tuition Centre - Homework

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

28th November	
$\begin{array}{r l} 9 & \square \\ 9 & \square \\ 7 & \square \\ \hline \square & \square \end{array}$	Find the row and column totals.
Simplify fully $\frac{21}{28}$	
$4.2 - 1.82$	
David buys a ruler for 80p and two pencils. Both pencils cost the same price.  David pays with a £10 note and receives £7.70 change.	How much does one pencil cost?
James is running in a 5 kilometres ran.  He has run 300 metres. How much further, in metres, must he run?	

# Heroes Tuition Centre - Homework

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

**29th November**

Harry buys a motorcycle for £2000.  
He pays for it over 4 equal monthly payments.

How much does he pay each month?

A pie is cut into 6 equal slices.  
One slice is eaten.

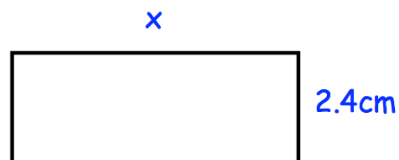
What fraction is left?



Write down the 15th odd number

The perimeter of the rectangle is 20cm.

Find x



There are 8200 fans at a rugby match between Bath and Newcastle.

3600 of the fans are female.

The rest of the fans are male.

$\frac{1}{4}$  of the male fans support Newcastle.

Work out how many male fans support Newcastle.

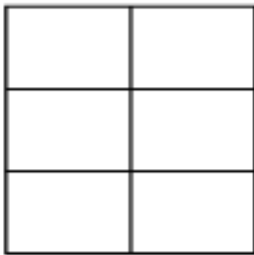
# Heroes Tuition Centre - Homework

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

**30th November**

Convert 8km into metres

Convert 3200g into kilograms



Shade in  $\frac{2}{3}$  of the grid.

Round 209,987 to the nearest 1,000

Anthony has £20.  
A snack costs 45p each.  
He buys as many snacks as possible.

How many snacks does he buy?

How much change does he get?