

Name: _____

Homework - Powers and Roots

Question 1

State the values of the following:

a) 4^2

b) 10^2

c) 12^2

Question 2

State the values of the following

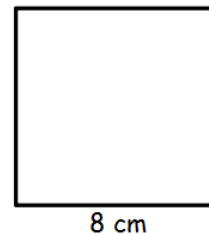
a) $\sqrt{36}$

b) $\sqrt{25}$

c) $\sqrt{121}$

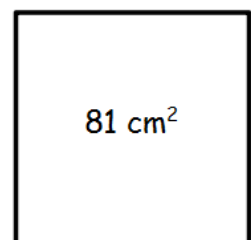
Question 3

State the area of the square with sides 8 cm.



Question 4

State the length of the square with an area of 81 cm^2



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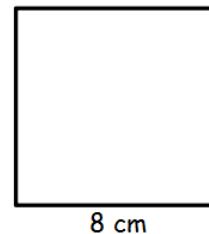
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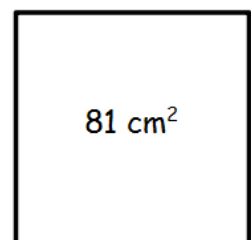
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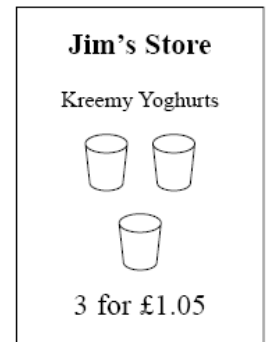
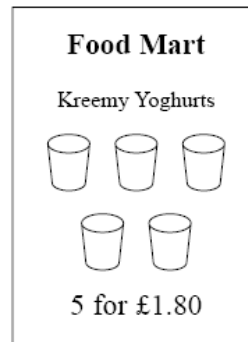
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Homework - Money

Question 1

Two shops sell Kreemy Yoghurts

At which shop are Kreemy Yoghurts the better value for money? Explain by showing all your working.



Question 2

The exchange rate is £1 to \$1.44

a) I want to change £1500 to dollars. How many dollars would I get?

b) On returning from America I have \$270 and change them back into pounds. I got £200, what was the exchange rate?

Question 3

I bought a new kitchen costing £8495. I took out a Hire Purchase contract agreement. I paid a deposit of £900 and £450 a month for 18 months.

How much would I have saved if I had paid cash ?

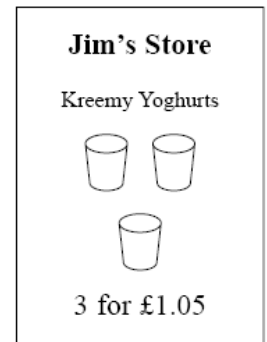
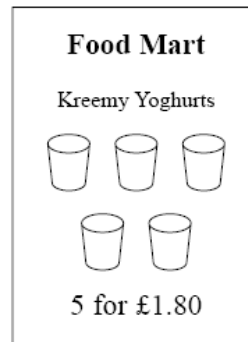
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Homework - Multiples and Factors

Question 1

Write down the first 8 multiples of 6

Question 2

Write down all the factors of 36

Question 3

Write down the lowest common multiple of the following:

a) 5 and 6

b) 8 and 10

Question 4

Write down the highest common factor of the following:

a) 20 and 24

b) 12 and 20

Question 5

Find all the prime factors of 20

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Homework - Patterns

Question 1

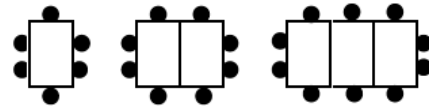
Write down the next two terms of the sequences:

a) 16, 20, 24, 28,

b) 93, 90, 87, 84,

Question 2

In a canteen the tables are set out like this:



a) Complete the table below:

Number of tables	1	2	3	4	5	6
Number of seats	6	8				

b) Using S for seats and T for tables. Complete the following formula:

$$S = \underline{\hspace{2cm}} \times T + \underline{\hspace{2cm}}$$

c) How many seats would be required for 17 tables?

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Homework - Patterns

Question 1

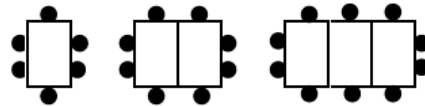
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Homework - Solving Equations

Question 1

Solve the following equations for x

a) $3x - 1 = 13$

b) $4x + 3 = 27$

c) $5x - 7 = 2x + 2$

d) $4x - 8 = 2$

e) $4(x + 1) = 3$

f) $\frac{1}{3}x + 2 = 7$

Question 2

Solve the inequalities

a) $3x - 4 \leq x + 2$

b) $3(2x - 1) > 15$

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Homework - Angles

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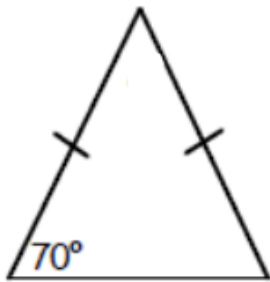
a) What is the complementary angle of 72° ?

b) What is the supplementary angle of 119° ?

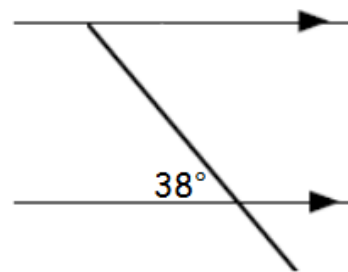
Question 2

Fill in all the missing angles

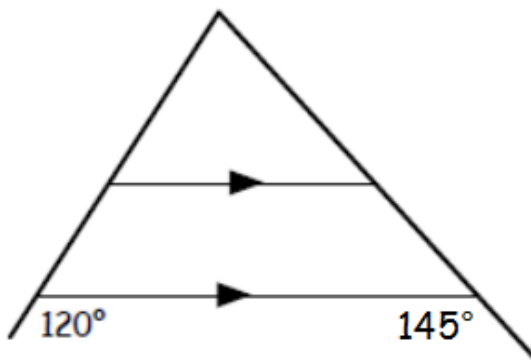
a)



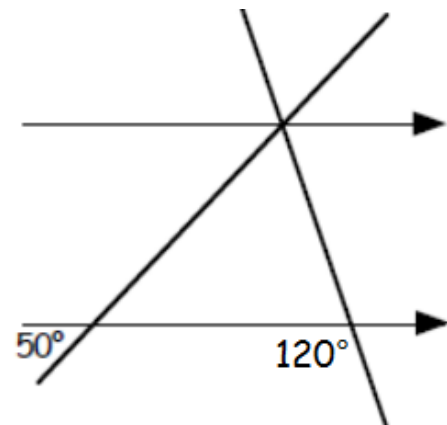
b)



c)



d)



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Homework - Angles

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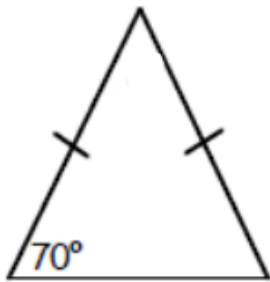
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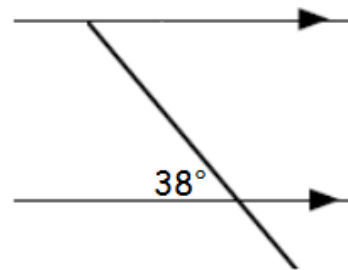
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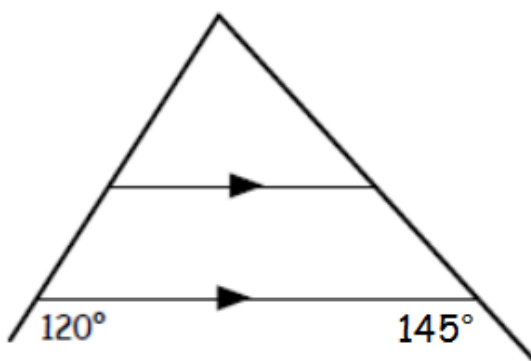
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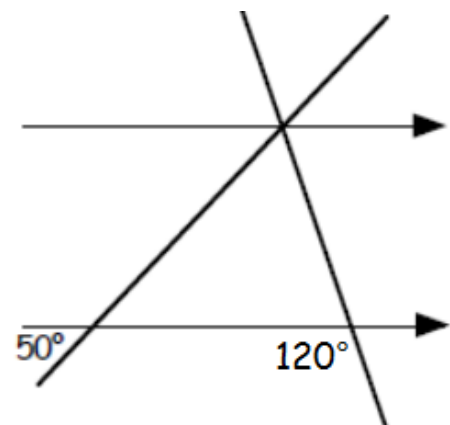
b)



c)



d)



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Homework - Fractions

Question 1

Change the following to a mixed number

a) $\frac{12}{7}$

b) $\frac{35}{9}$

Question 2

Change the following to an improper fraction

a) $3\frac{2}{7}$

b) $1\frac{3}{5}$

Question 3

Multiply the following questions and simplify where possible

a) $\frac{4}{7} \times \frac{7}{8}$

b) $2\frac{2}{3} \times 1\frac{6}{7}$

Question 4

Divide the following questions and simplify where possible

a) $\frac{4}{5} \div \frac{24}{25}$

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Homework - Scale Drawing

Question 1

Write the 3-figure bearing for:

a) North West

b) South East

Question 2

A toy truck has been made to a scale :- **1 cm to 1.5 m.**

If the length of the toy truck is 6 cm, what is the length of the **real** truck ?

Question 3

This lighthouse has been drawn using a scale of 1cm to 12m.

How high is the real lighthouse?



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Homework - Proportion

Question 1

Write the following ratios in their simplest form:

a) $34 : 18$

b) $12 \text{ cm} : 4 \text{ m}$

c) $5 \text{ m} : 10 \text{ cm}$

Question 2

Share 27 toffees between Brian and Helen in the ratio of 2 : 1 so that Brian gets the larger share.

Question 3

One pair of boots costs £55. How much would it be for 3 pairs?

Question 4

Seven bars of soap costs £14.70. How much would four bars cost?

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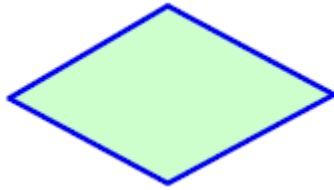
Homework - Symmetry

Question 1

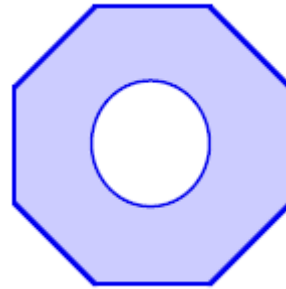
Name: _____

Write down the how many lines of symmetry the following shapes have:

a)

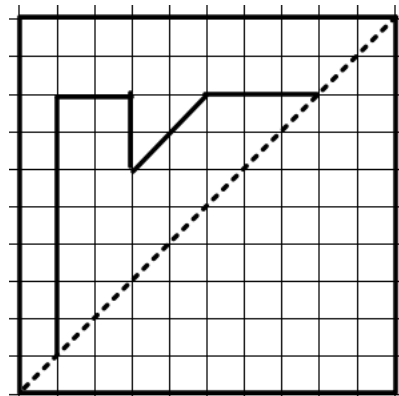
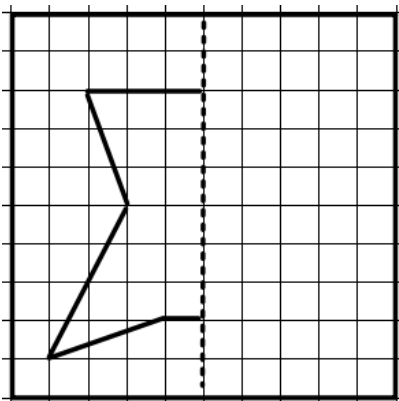


b)



Question 2

Complete these diagrams to make symmetrical shapes

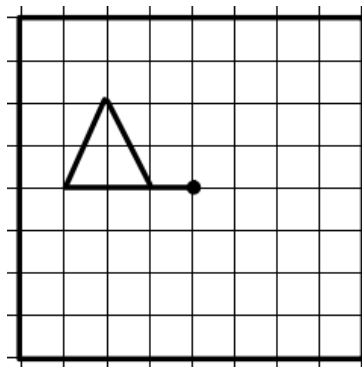


Question 3

Rotate the shape by 180°

Homework - Symmetry

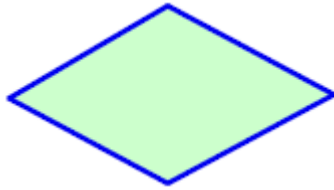
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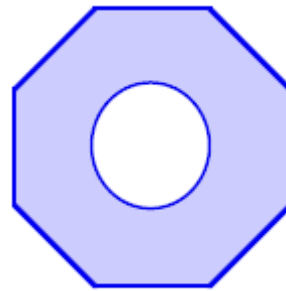
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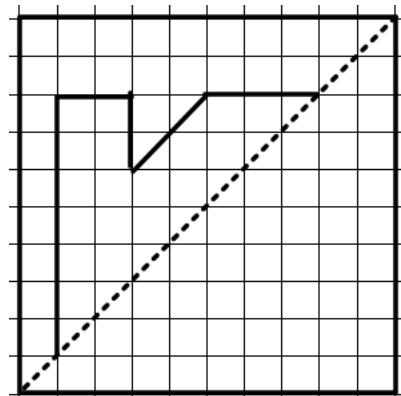
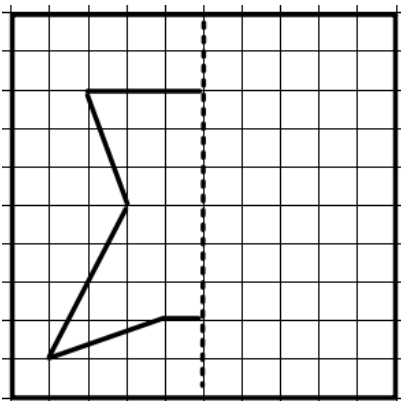


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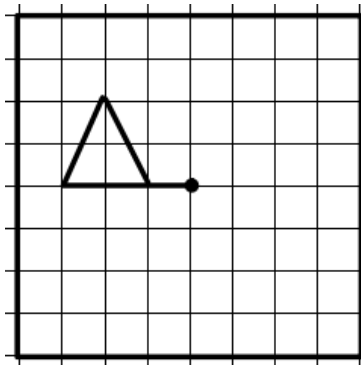
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Question 1

A bag contains 4 red counters, 5 blue counters and 3 orange counters. If a counter was chosen at random state the probability of picking:

- a) Red b) Blue c) White

- d) A red or a blue

Question 2

A dice is rolled and a coin is flipped. Complete the table of all possible combinations:

	1	2	3	4	5	6
Head	H 1	H 2				
Tail			T 3			

State the probability of getting

- a) A Tail and an odd number
- b) A Head and a number greater than 2

Homework - Probability

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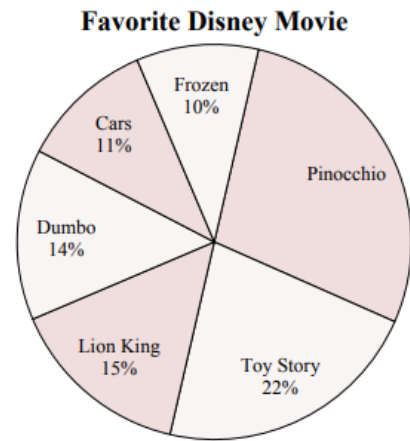
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Homework - Statistics

Name: _____

Question 1

A group of 200 people were asked for their favourite Disney Movie and the results were recorded in the pie chart.



- a) What was the least popular movie?
- b) What percentage of people selected Pinocchio?
- c) How many people selected Dumbo?

Question 2

Here are the weights, in kg, of 8 people; 63 65 65 70 72 86
90 72

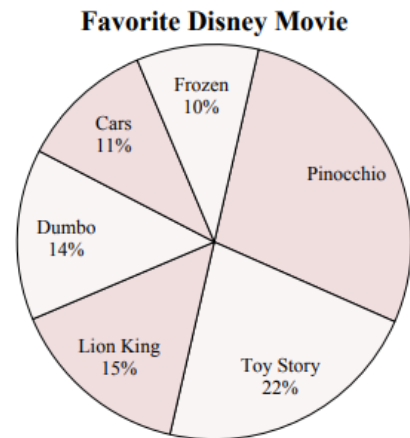
- a) State the range of the weights
- b) State the median weight
- c) Work out the mean weight

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Homework

Name: _____

Question 1

Round the following to 1 significant figure

a) 4590.7

b) 0.00667

c) 0.9978

Question 2

Round to 1 significant figure to estimate the following

a) 4500×831

b) 93.7×195

c) $79000 \div 390$

d) $24000 \div 47$

Question 3

Calculate the approximate circumference of a circle with radius 8 cm.

Homework

Name: _____

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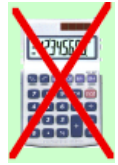
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Homework - Non Calculator Work



Question 1

Work out

a) $521.7 + 387.52$

b) $607.5 - 291.63$

Question 2

a) 235×9

b) 531.76×6

Question 3

Round to 2 decimal places

a) $521 \div 7$

b) $741 \div 8$

Name: _____

Homework - Non Calculator Work



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