

1st May

Foundation 5-a-day



Corbettmαths

Find the value of $5x + 3y$ when
 $x = 6$ and $y = 7$

Find the output if the input is 27



Find the input if the output is 0

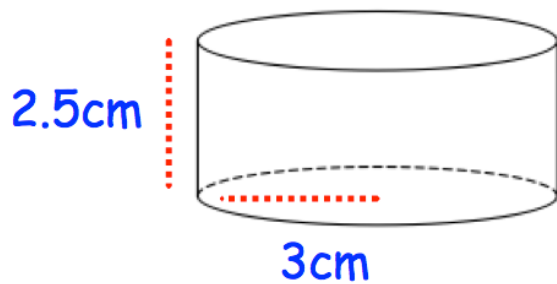


Simplify

$$m^8 \div m^2$$

Simplify

$$(m^3)^2$$



Find the volume of the cylinder

$$s = \frac{m}{c}$$

Make m the subject

2nd May

Foundation 5-a-day



Corbettmαths

Work out the median

3 8 4 8 3 5 9

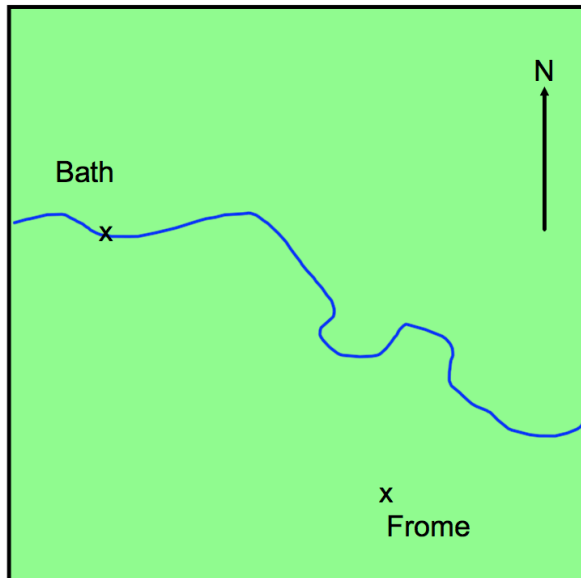
Work out the range

3 8 4 8 3 5 9

Ian is 1.83m tall

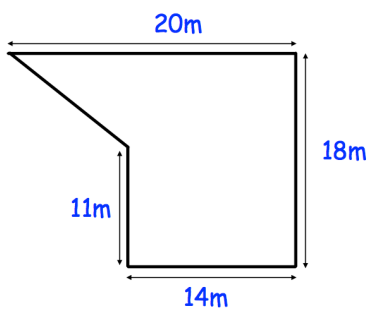
Donna is 6cm shorter

What is Donna's height in metres?



Find the bearing of Frome from Bath.

Find the bearing of Bath from Frome.



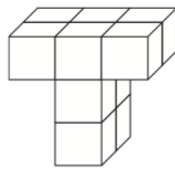
Find the area of the shape.

3rd May

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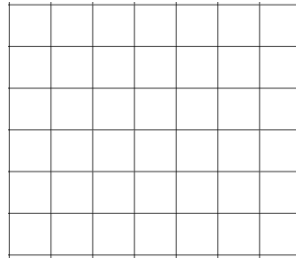


Corbettmαths

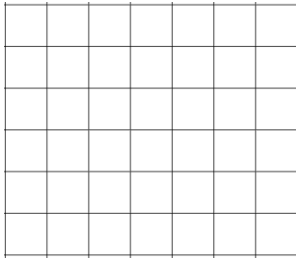


Front

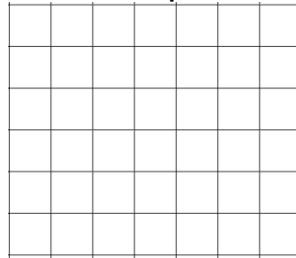
Draw the front view



Draw the side view



Draw the plan view



Write 60 as a product of primes, in index form.

Factorise $35w - 45y$

Henry and Lily share 65 sweets in the ratio 2:3.

How many sweets does each person receive?

4th May

Foundation 5-a-day



Corbettmαths

Simplify $6b - 4b$

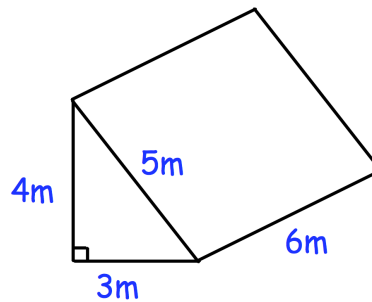
Simplify $2b \times 3c$

A cuboid has sides length 3cm, 4cm and 5cm.

Work out the volume

Work out the surface area

Calculate the volume of the triangular prism.



Increase £54 by 17%

$$c^{10} \div c^5$$

$$c^{16}$$

$$c^7 \times c^3$$

$$c^5$$

$$(c^8)^2$$

$$c^2$$

$$\frac{c^6}{c^4}$$

$$c^{10}$$

Match each of the expressions



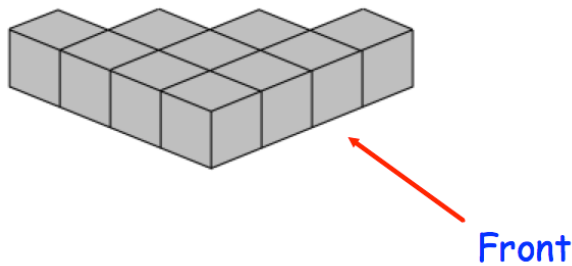
SALE
 $\frac{1}{3}$ OFF ALL ITEMS

The original price of a football is £8.16

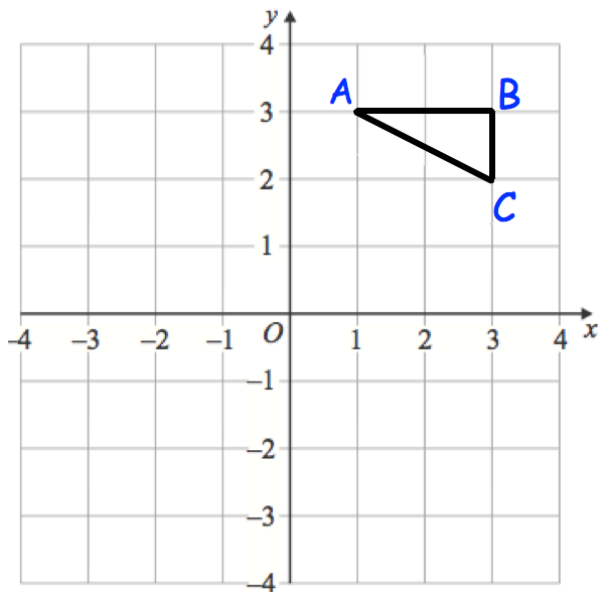
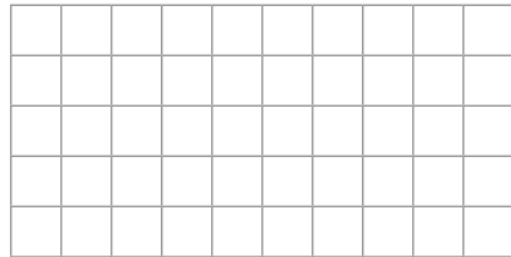
What is the sale price?

Apples cost a pence each.
Bananas cost b pence each.

Write down an expression for the total cost, in pence, of 6 apples and 2 bananas.



Draw the plan view



Reflect triangle ABC in the y-axis.

Label the triangle, D.

Rotate triangle ABC 90 degrees clockwise about the origin.

Label the triangle, E.

6th May

Foundation 5-a-day

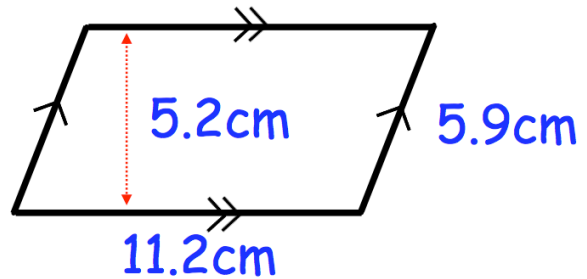


Corbettmαths

3 paintings cost £186

How much do 5 paintings cost?

Calculate the area of the parallelogram.



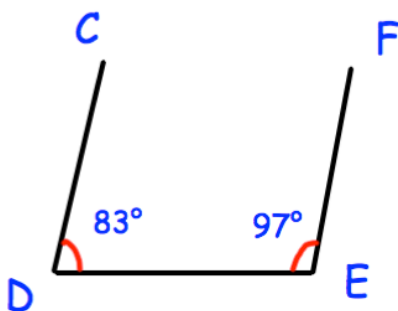
Work out

$$100 - 5^2 \times 2$$

Find the nth term of

9 13 17 21

Find the 50th term.



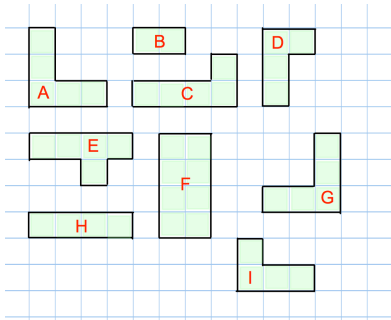
Are CD and EF parallel lines?

7th May

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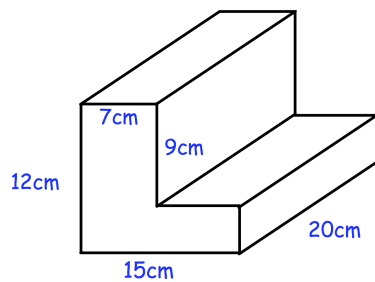


Corbettmαths



Which shape is congruent to A?

A man drives 230 miles in 5 hours.
What is his average speed?



Calculate the volume.

Faith is 1.42 metres tall.
Jo is 3 centimetres taller than Faith.

Work out Jo's height in metres.

Patrick's height is 150 centimetres.
During one year, his height increase
by 5%.

Work out the increase in Patrick's
height.

8th May

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Corbettmαths

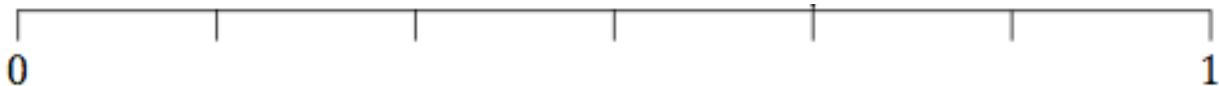
Simplify

$$8x - 3y + x - 2y$$

2 3 2 1 3 4 5 2 3 3

Calculate the mean

Calculate the range

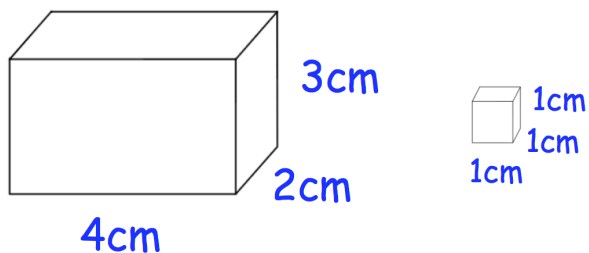
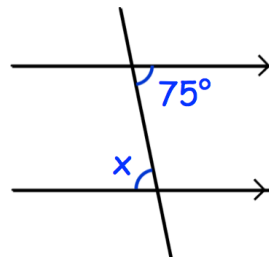


Label the probability scale to show:

- a) The probability of rolling an even number on a dice. Label it with an A
- b) The probability of rolling a number below 3. Label it with a B

Work out the size of the angle marked x.

Give a reason for your answer.



How many centimetre cubes are needed to fill the box?

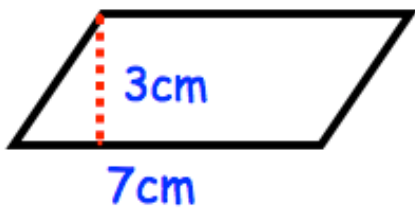


Work out 20% of 30

Write down 5 numbers with a mode of 3 and a median of 4.

Arrange in order, from smallest to largest

$$\frac{7}{12} \quad \frac{1}{3} \quad \frac{5}{6}$$



Calculate the area of this parallelogram

\$1.50 = £1

A pairs of trainers cost \$30 in New York or £18 in London.

Which is better value?

10th May

Foundation 5-a-day



Corbettmαths

Logan has £1.75
Hunter has £2.35

How much money does Hunter give Logan so that they have the same amount?

Shortbread

Serves 8

Butter	150g
Caster Sugar	75g
Plain Flour	175g
Cornflour	50g

How much of each ingredient will he need for 12 people?

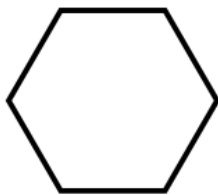
Butter:g

Caster Sugar:g

Plain Flour:g

Cornflour:g

$2x + 1$



Write an expression for the perimeter of this regular hexagon.

Solve $\frac{x}{2} + 3 = 7$

Martha has 40 postage stamps.

The ratio of second class to first class is 3:2.

Work out how many second class stamps Martha has.

11th May

Foundation 5-a-day



Corbettmαths

A bag contains 16 coloured balls.
Three are red, five are blue and the
rest are black.

Frances takes out a ball at random,
what is the probability of a:

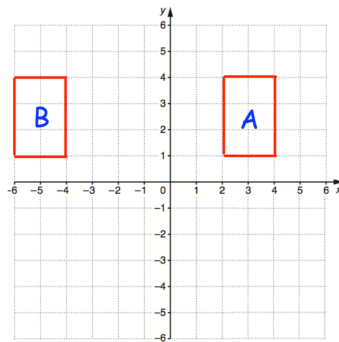
a) red

b) black

$$\frac{5}{2}$$

Write as a mixed number

Draw the mirror line on the grid



$$10 \square 2 \square 5 = 1$$

Put operations into the boxes to
make the sum correct.

Expand $2w(6 - 5w)$

Expand $a(a + c)$

12th May

Foundation 5-a-day



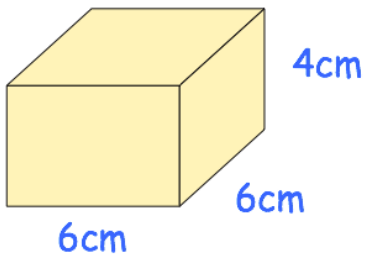
Corbettmαths

Sarah normally earns £600 each month.
In December she is given a bonus of a $\frac{1}{5}$ of her normal pay.

Work out her total pay for December.

$$\sqrt{x} = 8$$

What is the value of x?

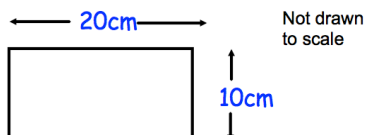


Calculate the volume of the cuboid

Find the value of:

$$\frac{3w + 1}{10}$$

When $w = 5$



The length of the rectangle is increased by 20%.
The width of the rectangle is increased by 5%.

Find the area of the enlarged rectangle.

13th May

Foundation 5-a-day



Corbettmαths

Write as a mixed number

$$\frac{5}{3}$$

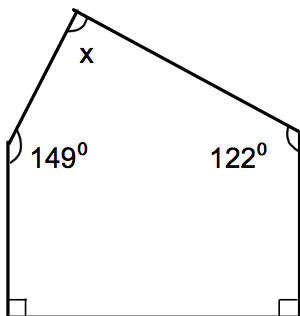
The population of an island in 2000 was 2385

By 2015 the population has decreased by $\frac{2}{5}$

What was the population of the island in 2015?

Make a the subject

$$a + c = g$$



Find the value of x

$$\frac{4}{9} + \frac{1}{2}$$

$$\frac{1}{2} \div \frac{3}{4}$$

14th May

Foundation 5-a-day



Corbettmaths

$$3.4 \div 4$$

$$7.2 \div 5$$

Increase £40 by 30%

Decrease £260 by 5%

		spinner 1		
		1	2	3
spinner 2	2	2	4	
	3			

Two spinners are spun. The scores are multiplied together to give a total score.

Complete the table.

What is the probability of an odd total score?

Omar is organising a charity concert at school.

The concert is sold out.

The hall holds 31 rows of 19 seats.

Each person will pay £5.

How much money will Omar raise for charity?

Candles normally cost £6 each.

Two websites have special offers

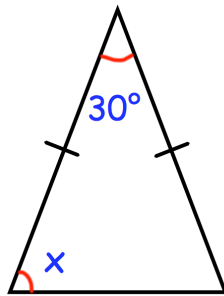
Corbettmaths Candles

Candles'R'us

Buy 3 get 1 free

20% off

Laura wants to buy 30 candles.
Which website should Laura use?

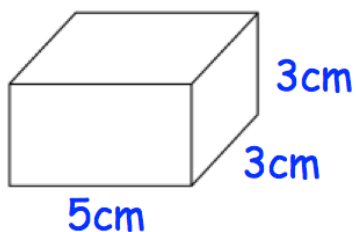
Find x

Martin is x years old.
Jennifer is 6 years younger than Martin.
Connor is three times as old as Martin.

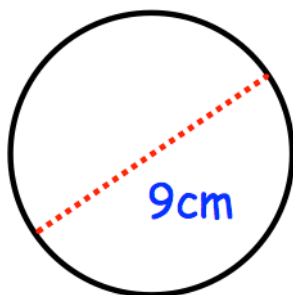
Write an expression for Jennifer's age.

Write an expression for Connor's age.

Expand $6(x - 3)$



Calculate the surface area of the cuboid



Calculate the area of the circle

16th May

Foundation 5-a-day

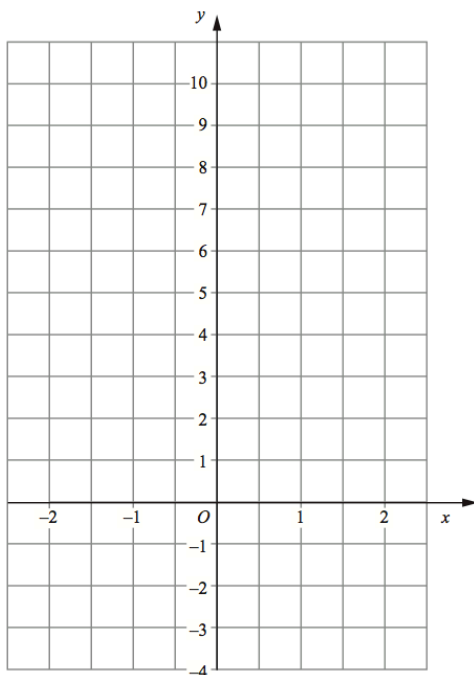
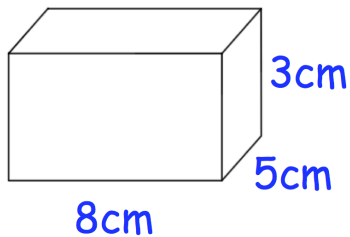


Corbettmαths

	London	New York	Beijing
High	29°C	30°C	41°C
Low	-3°C	-10°C	2°C

Which city had the largest difference between their high and low temperature?

Calculate the volume



Complete the table of values for $y = 4x + 2$

x	-1	0	1	2
y				

On the grid, draw the graph of $y = 4x + 2$

Simplify

$$\frac{c^6}{c^4}$$

Simplify

$$(c^8)^2$$

17th May

Foundation 5-a-day



Corbettmαths

Write 0.06 as a fraction in its simplest form

Write 12% as a fraction in its simplest form

Simplify

$$8m - 2m$$

Simplify

$$m + m + m + m$$

Round the number 7.873 to one decimal place.

Round the number 7.873 to two decimal places.

Work out an estimate for

$$\begin{array}{r} 20.2 \times 698.1 \\ \hline 19.8 \times 5.3 \end{array}$$

Mrs Jenkins is organising a charity raffle.
She sells 300 tickets for £3 each.
The probability that someone wins a prize is 0.2
Each prize cost £8
The profit is donated to charity.

Work out how much money Mrs Jenkins donates to charity.

18th May

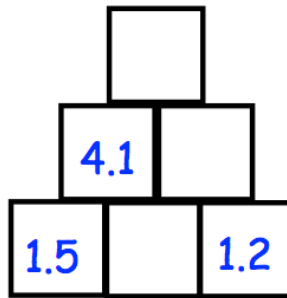
Foundation 5-a-day



Corbettmαths

The number in each block is found by adding the two blocks directly beneath it.

Find the missing numbers.



Expand

$$5(x + 3)$$

Expand

$$y(y - 4)$$

Here are the first five terms of a number sequence.

3 8 13 18 23

Here are the first four terms of another number sequence.

-2 4 10 16

Find two numbers that are in both number sequences.

Sarah makes cupcakes.
She makes 20 cupcakes per hour.

She makes cupcakes for $3\frac{1}{4}$ hours each day, for 5 days of the week.

The cupcakes are packed into boxes that hold 6 cupcakes.

How many boxes are needed to hold all the cupcake cakes Sarah has made in 5 days?

19th May

Foundation 5-a-day



Corbettmαths

$$\square + \square = \boxed{0}$$

$$\square + \square = \boxed{2}$$

$\boxed{7}$ $\boxed{5}$ $\boxed{2}$ $\boxed{-2}$ $\boxed{-5}$

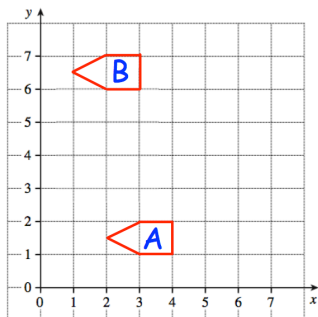
Use the numbers above to complete the sums.

Shown below is a conversion to change between kilograms and pounds.



Using the graph, convert 10 kilograms to pounds.

Convert 110 pounds to kilograms.



Write down the translation vector that would take A to B.



The price of a new car is £18000
In a sale, the price is reduced by $\frac{2}{9}$

Ryan buys the car in the sale.
He pays a £2000 deposit and pays the rest over 20 monthly payments.

Find the cost of each monthly payment.

20th May

Foundation 5-a-day



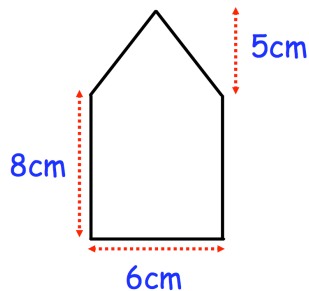
Corbettmαths

Mon Tues Wed Thurs Fri
2°C -4°C -1°C 3°C 0°C

Put these temperatures in order from lowest to highest

Work out the difference between the lowest and highest temperatures

Work out the median temperature



Calculate the area

Work out the value of

$$3^4$$

Work out the value of

$$9^3$$

Factorise

$$12y + 16$$

729 is both a square number and a cube number.

Find two other numbers that are both square numbers and cube numbers.



<p>Solve</p> $\frac{x}{4} = 11$	<p>Solve</p> $4x + 2 = 22$
<p>Nicola has y marbles. Sean has 45 marbles. Vicky has 10 marbles.</p> <p>Write down an expression for the total number of marbles they have.</p>	
<p>Find the value of $2x - 4$</p> <p>When $x = 10$</p>	<p>Find the value of $10 - 2x$</p> <p>When $x = 3$</p>
<p>Write these numbers in order of size. Start with the smallest number.</p> <p>73% $\frac{2}{3}$ 0.9 $\frac{3}{4}$ 0.87</p>	
<p>Write 28 as a product of primes. Give your answer in index form.</p>	



Work out 0.9×1.4

Work out 0.4×0.07

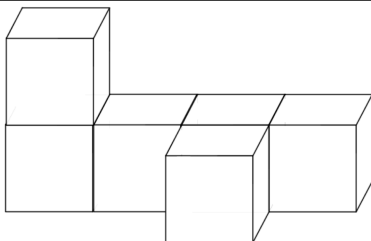
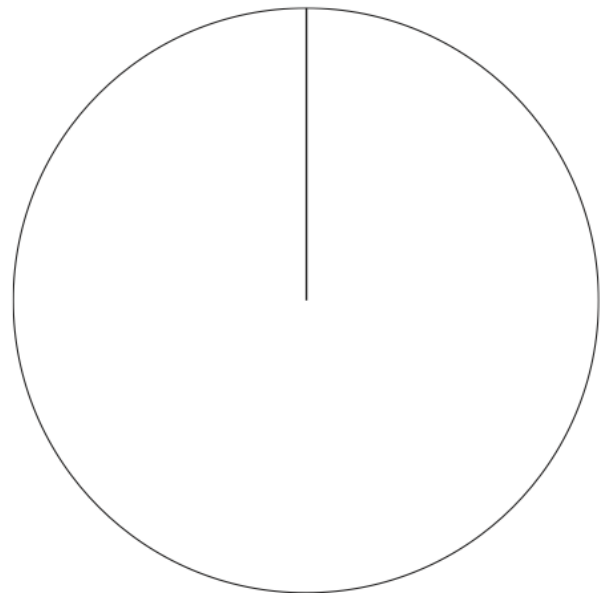
Tilly the dog barks every 9 seconds.
Billy the dog barks every 12 seconds.
They both bark at the same time.

After how many seconds will they next bark at the same time?

The table gives information about the colour of cars in a car park.

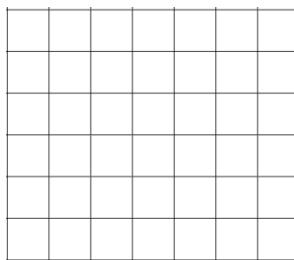
Colour	Frequency
Blue	25
Green	14
Red	21

Calculate the size of each angle and then draw an accurate pie chart.



Front

Draw the side elevation



23rd May

Foundation 5-a-day



Corbettmαths

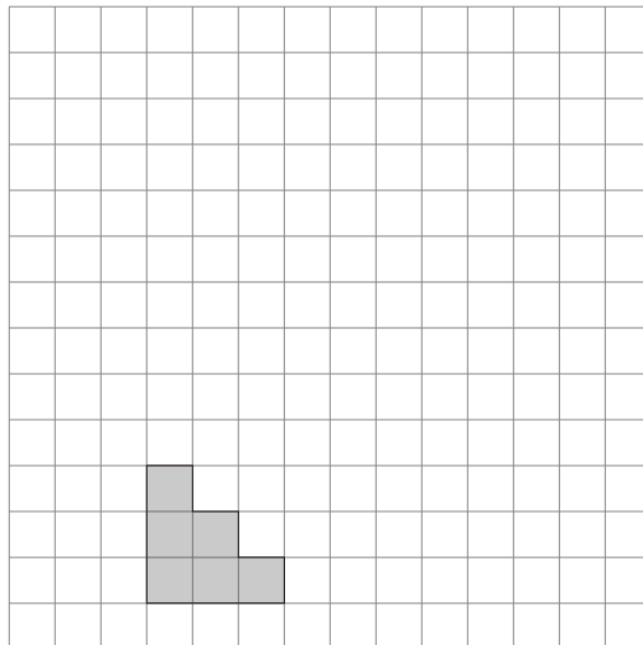
Write 0.85 as a fraction in its simplest form

Write 40% as a fraction in its simplest form

Solve $7y + 3 = 38$

Solve $4(y - 2) = 20$

Enlarge the shape by scale factor 2



Write 60 as a product of primes.

Give your answer in index form

24th May

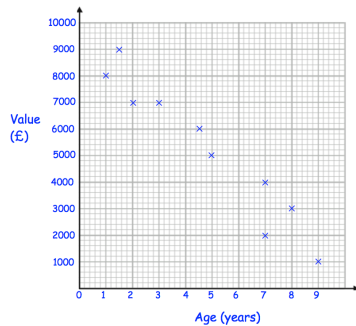
Foundation 5-a-day



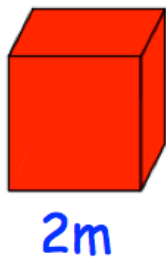
Corbettmαths

Increase \$6 by 5%

Decrease 90kg by 20%



What type of correlation is shown?



Find the volume of the cube

Find the surface area of the cube

Solve $8(x + 3) = 120$

Orlando cycles at an average speed of 20mph.

How far does he cycle in 3 hours?

Mylo cycles at an average speed of 20mph.

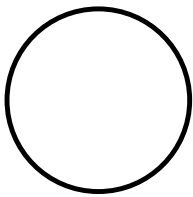
How far does he cycle in 45 minutes?



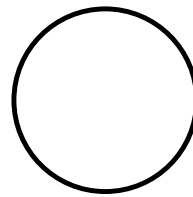
In a class of 20 students, 12 are male.

What fraction of the class are male?

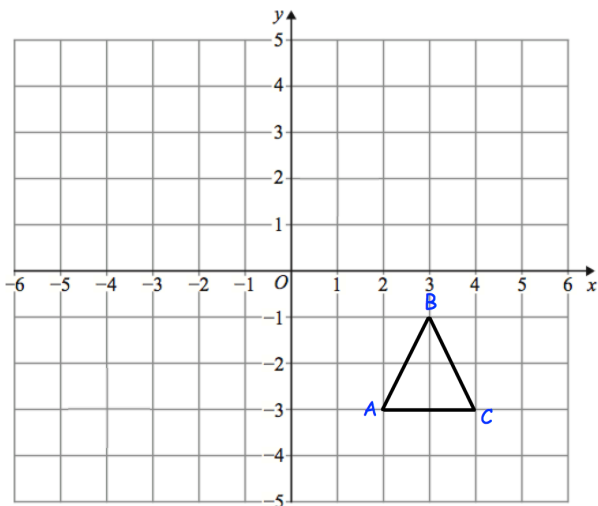
What percentage of the class are male?



Draw the tangent



Draw a chord



Reflect triangle ABC using the mirror line $y = 1$

Label the triangle, D.

Translate triangle ABC by the vector

$$\begin{pmatrix} -5 \\ -2 \end{pmatrix}$$

Label the triangle, E.

A first class stamp costs 67p and second class stamp costs 58p
The ratio of first class stamps to second class stamps that George buys is 1:4
He bought 20 stamps.

How much did the stamps cost George?

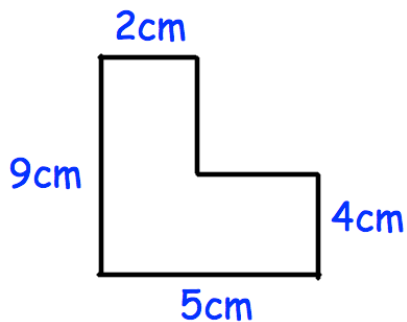


Expand $2y(3y + 5)$

Four rulers cost £3.60, what would seven rulers cost?

Riaz buys 20 cameras.
He pays £84 for each camera.
He sells each camera for 45% more than he paid for them.

How much profit does he make?



Calculate the area

Mrs Jenkins gives £400 to her children Ally, Barry and Cat in the ratio 1:2:5.

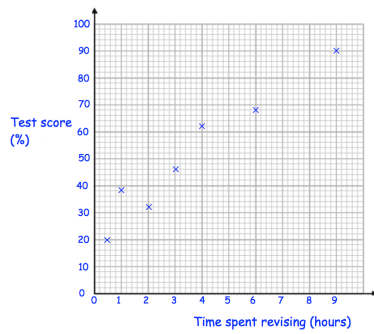
How much do they each receive?

27th May

Foundation 5-a-day



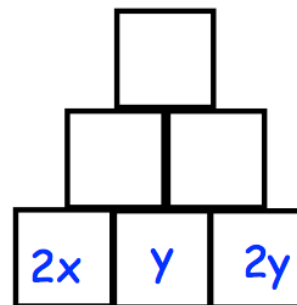
Corbettmαths



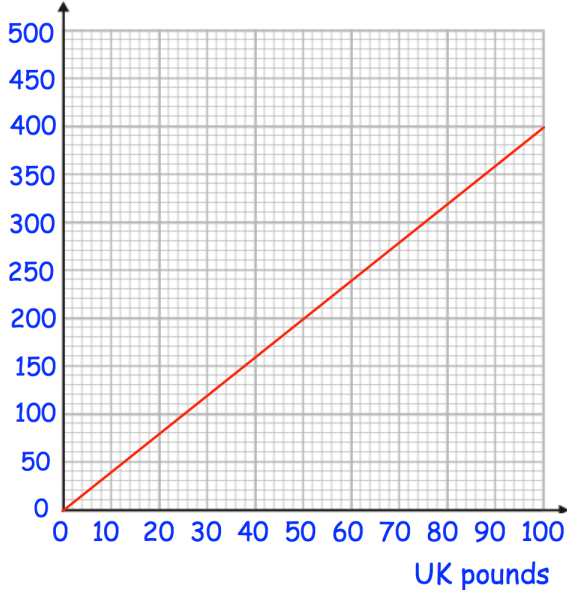
What type of correlation is shown?

The expression in each block is found by adding the two blocks directly beneath it.

Find the missing expressions.



Turkish Lira



Convert £20 into Turkish Lira

Which is worth more £70 or ₺290?

Estimate 29.1×5.9

28th May

Foundation 5-a-day

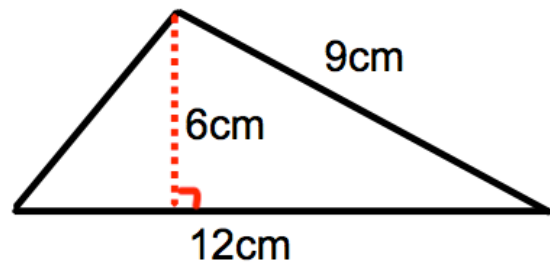


Corbettmαths

Work out

$$3^3 - 4^2$$

Find the area of the triangle



£1 = 4.5 Polish zloty

Convert £20 into zloty

Convert 900 zloty into pounds

The number of goals scored in a season by seven players were:

48 32 0 62 11 21 43

Calculate the mean

An eighth player brings the mean goals scored up to 33. How many goals did he score?

One angle in an isosceles triangle is 40° .

Write down the sizes of the other two angles.

Write a different pair of possible angles.

29th May

Foundation 5-a-day



Corbettmαths

A holiday normally costs £700.

A sign says

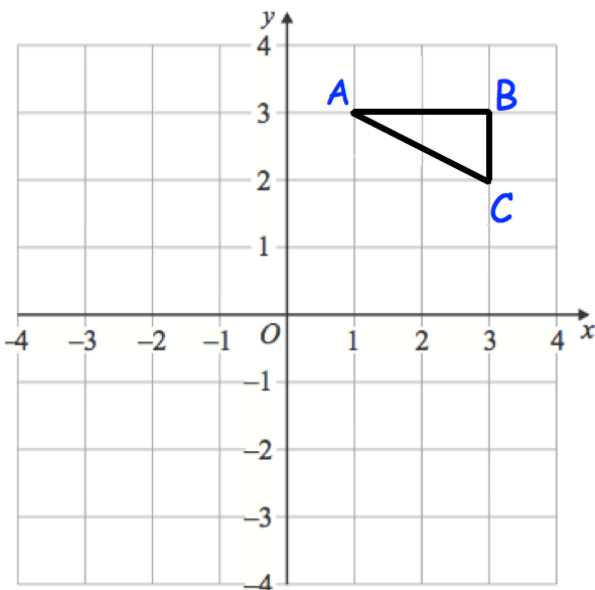
$\frac{1}{5}$ off

What is the new cost?

A rugby team can win, draw or lose a match

Result	Win	Draw	Lose
Probability	0.4	0.35	

Find the missing probability



Reflect triangle ABC in the x-axis.

Label the triangle, D.

Rotate triangle ABC 90 degrees anti-clockwise about the origin.

Label the triangle, E.

Estimate the value of

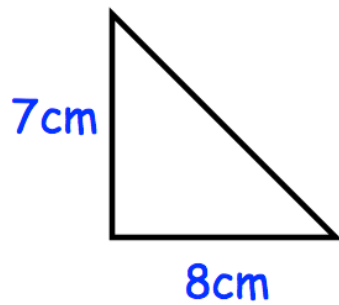
$$\sqrt{\frac{50.77}{0.513}}$$

30th May

Foundation 5-a-day



Corbettmαths



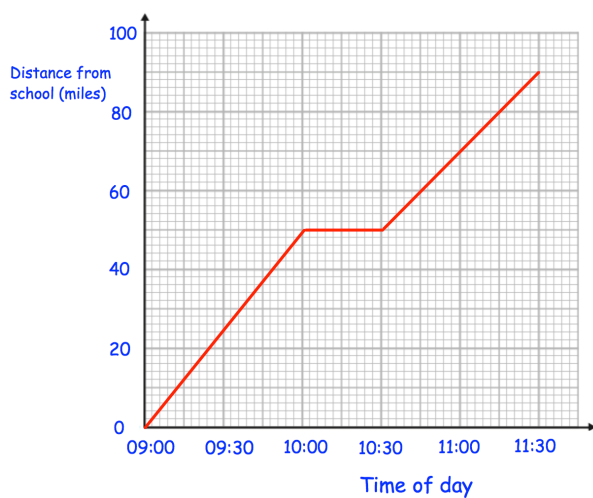
Calculate the area

Write down the cube root of 64

$$\frac{2}{5} \times \frac{3}{10}$$

$$\frac{9}{10} - \frac{1}{3}$$

The distance-time graph shows the journey of a car.



How far had the car travelled when it first stopped?

Work out the speed of the car between 9am and 10am.



Oranges cost x pence each.

Write an expression for the total cost of 5 oranges.

Bananas cost y pence each.

Write an expression for the total cost of one orange and one banana.

Solve $4y + 6 = 12$

Solve $10x - 3 = 8$

The probability of James winning a competition is 0.03

What is the probability that James does not win the competition?

Make w the subject

$$4w + c = m$$

150 sheets



Small

75p

400 sheets



Regular

£2.08

Which of the two packets gives the better value for money?

You must show your working.