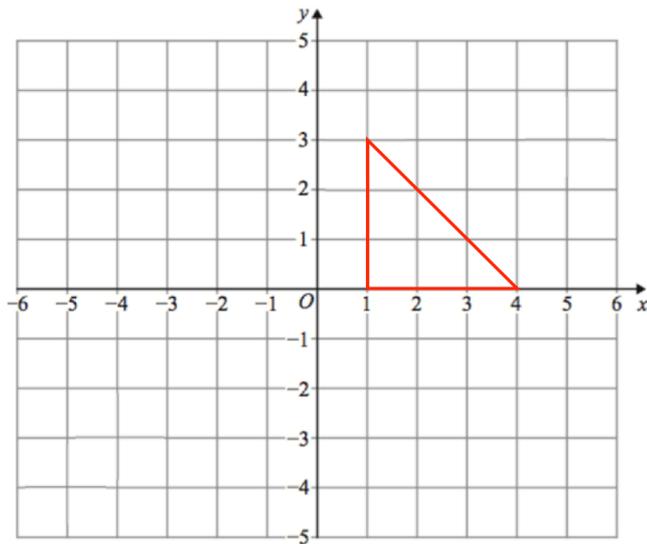


**1st August**

Corbettmaths



Translate the red triangle, by the translation vector

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

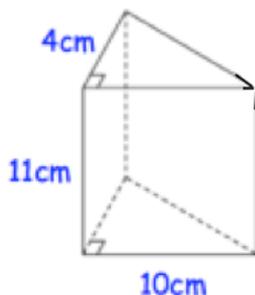
Solve  $6x - 10 = 8$

Solve  $8 - x = 2$

The ratio of red beads to white beads on a necklace is 2:1.

What fraction of the beads are white?

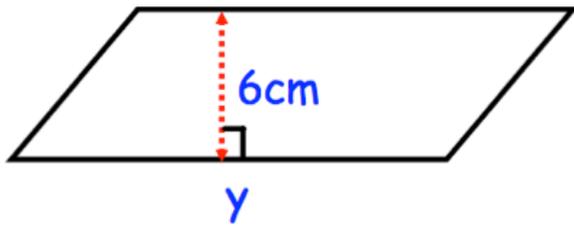
There are 42 red beads, how many beads are there in total?



Calculate the volume of this prism.

**2nd August**

Corbettmaths

The area of the parallelogram is  $72\text{cm}^2$ Find  $y$ 

Andy earns £300 per week.

He is awarded a pay rise of 40%

What is his new wage?

Share 4000 in the ratio 2:3

$$\frac{4}{5} \div \frac{5}{6}$$

Solve  $7(2y + 3) = 140$

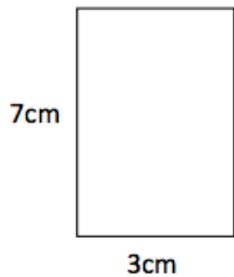
**3rd August**



Corbettmaths

The depth of a river is 160cm and each day it falls by 3cm.

After how many days will the depth of the river fall to 124cm?



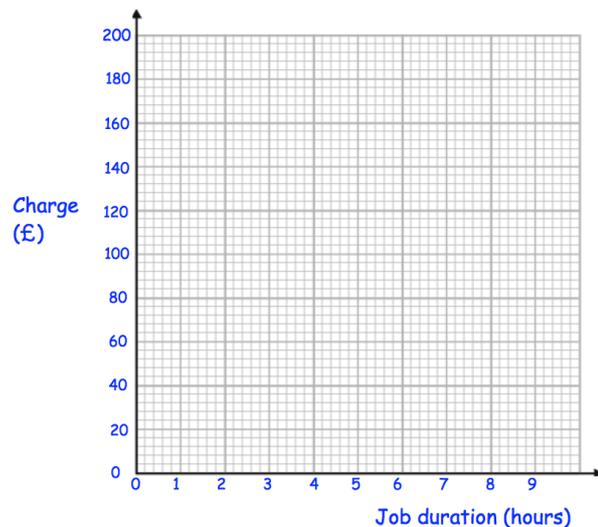
Calculate the perimeter of the rectangle

The rectangle is folded vertically.

Calculate the perimeter of the new rectangle

Plot the data on the scatter graph

|                      |    |    |     |     |     |     |     |
|----------------------|----|----|-----|-----|-----|-----|-----|
| Job duration (hours) | 1  | 2  | 3   | 3   | 5   | 6   | 6   |
| Charge (£)           | 60 | 80 | 104 | 116 | 128 | 140 | 160 |

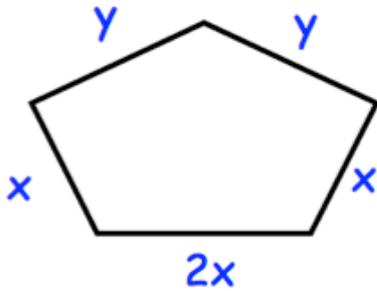


Describe the relationship between the job duration and the charge.

4th August



Corbettmaths



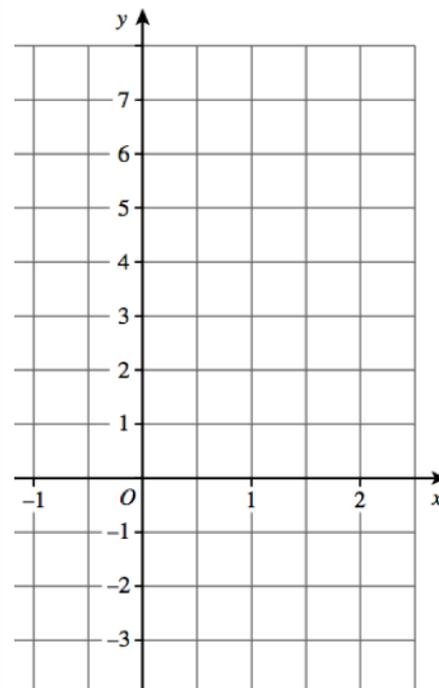
Write an expression for the perimeter

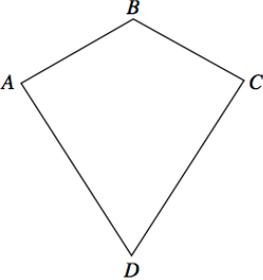
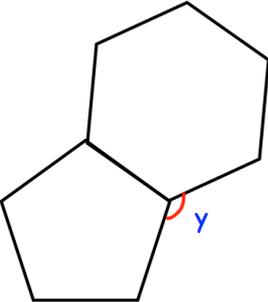
The median of five numbers is 7.

Four of the numbers are 2, 7, 8 and 9.

Write down a possible value of the fifth number.

|   |    |   |   |   |
|---|----|---|---|---|
| x | -1 | 0 | 1 | 2 |
| y |    |   |   |   |

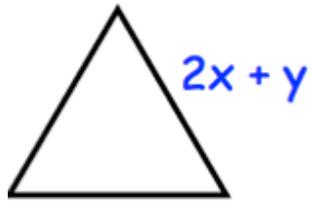
Complete the table for  $y = 3x + 1$ Draw the graph  $y = 3x + 1$  on the grid.Work out  $3.4 \times 8.25$

| 5th August  |  |
|---|--|
| <p>Simplify</p> <p><math>3a + 3a + 3a</math></p>  | <p>Simplify</p> <p><math>a \times a</math></p>                         |
|                            | <p>Is AB perpendicular to BC?</p> <p>Does Angle B = Angle D?</p>       |
| <p>Work out the midpoint of AB, if</p> <p>A is the coordinate (5, 1)</p> <p>B is the coordinate (9, 12)</p> |  |
| <p>Mary cycles at 20mph for <math>1\frac{3}{4}</math> hours.</p> <p>How far does she cycle?</p>             |  |
|                          | <p>Shown is a regular hexagon and regular pentagon.</p> <p>Find y.</p> |

6th August



Corbettmaths



Shown is an equilateral triangle.

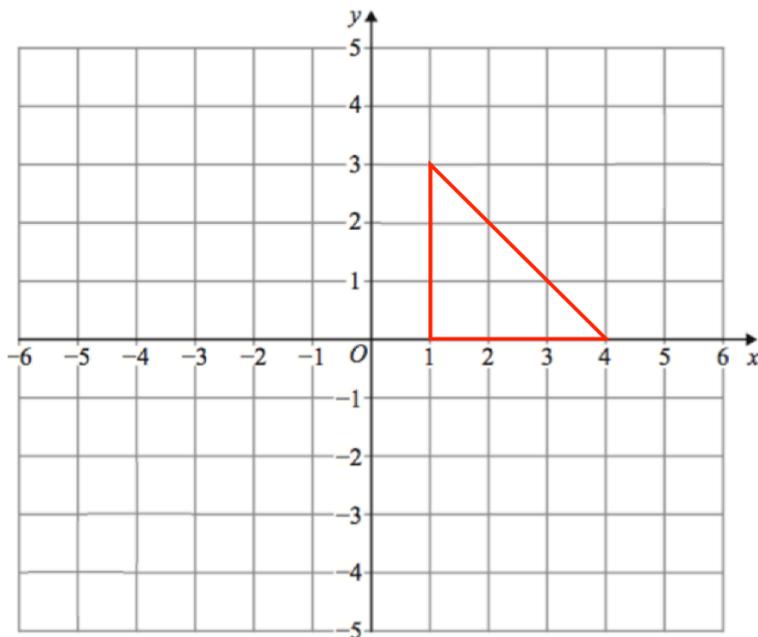
Write an expression for the perimeter

$$v = u + 10t$$

Find  $V$  if  $u = 3$  and  $t = 5$ Work out the  $n$ th term of

13 18 23 28 ....

Work out the 40th term.

Rotate the triangle 90 degrees anticlockwise about the coordinates  $(-1, 0)$

| 7th August   |   |
|--|---|
| Write 35% as a decimal   | <br>Corbettmaths |
| There are 135 pupils in Year 10 at a school<br><br>$\frac{2}{5}$ of these students are girls.  | How many students are male?   |
| <b>Calculate the mean of:</b><br><b>2 7 1 1 1</b><br><b>5 2 1 1 5</b>  |   |
| Work out $0.7 \times 0.2$  |   |
| The mean of five numbers is 7.<br><br>Four of the numbers are 2, 7, 8 and 9.<br><br>Write down a possible value of the fifth number. |   |

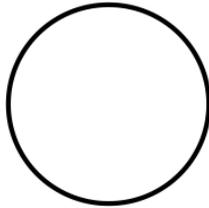
**8th August**

Corbettmaths

Solve  $5x + 3 = 58$ 

Solve

$$\frac{w}{3} = 12$$



Draw a tangent.

The ratio of boys to girls in a class is 2:3.

Explain why there cannot be 22 students in the class.

James buys 10 boxes of orange juice.

The cost of each box is £4.  
Each box contains 10 cartons of orange juice.James sells  $\frac{3}{4}$  of the cartons for 80p each.

She then reduces the price by 25% and sells the remaining cartons.

Work out the total profit.

**9th August**

Corbettmaths

Write down the cube root of 125

Work out

$$5^4$$

Work out

$$10^5$$

Write  $0.67$   $\frac{5}{8}$   $\frac{4}{5}$   $70\%$ 

In order of size, starting with the smallest.

Seb and James share money in the ratio 2:7.

James receives £30 more than Seb.

How much does James receive?

$$\text{Estimate } \underline{98.7 \times 3.05}$$
$$0.497$$

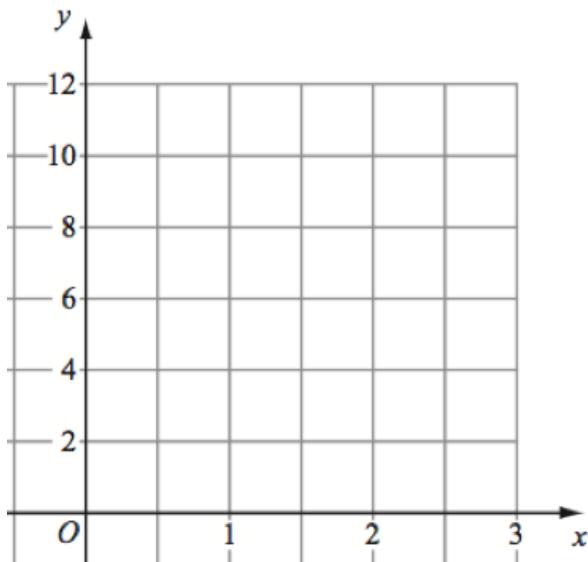
**10th August**

Corbettmaths

Write a number that is both a square number and a cube number.

Simplify

$$2x + 3y + 5x - 2y - 4x$$



Draw the graph  $y = 2x + 4$

Draw the graph  $y = 6$ .

Make  $w$  the subject

$$a = \frac{w}{c}$$



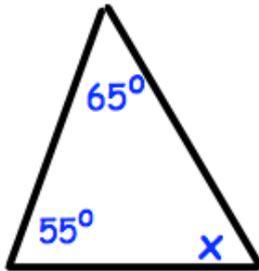
| 11th August   |  |
|---|--|
| Simplify $a + a + a$  | Simplify $a \times a$  |
| Two angles in a triangle are 50 degrees and 36 degrees.<br>Calculate the third  |  |
| $20\% \text{ of } 30 = \underline{\quad}$<br><br>$50\% \text{ of } \underline{\quad} = 30$  |  |
| <p>p and q are odd numbers</p> <p>Is <math>p + q</math></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"><input type="checkbox"/><br/>odd</div> <div style="text-align: center;"><input type="checkbox"/><br/>even</div> <div style="text-align: center;"><input type="checkbox"/><br/>either</div> </div> | <p>Is pq</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"><input type="checkbox"/><br/>odd</div> <div style="text-align: center;"><input type="checkbox"/><br/>even</div> <div style="text-align: center;"><input type="checkbox"/><br/>either</div> </div> |
| <p>Make w the subject</p> $y = 3w - a$  |  |

**12th August**

A win is worth 3 points.  
 A draw is worth 1 point.  
 A loss is worth -1 point.

How many points do Sunderland City have?

|                 | Wins | Draws | Losses |
|-----------------|------|-------|--------|
| Sunderland City | 6    | 5     | 3      |



Find  $x$

Write 15% as a decimal

Write 0.8 as a percentage

|     |   |   |   |   |   |
|-----|---|---|---|---|---|
| $x$ | 0 | 1 | 2 | 3 | 4 |
| $y$ |   |   |   |   |   |

Complete the table of values for  $y = x^2$

Factorise

$$25y + 50$$

Factorise

$$4y^2 + 6y$$

**13th August**

Corbettmaths

This sequence increases by the same amount each time. Find the two missing numbers.

12 ..... 39

200 tickets are sold in a raffle

There is one prize.

Dave buys one ticket. What is the probability that he wins the prize?

Joanne buys five tickets.

What is the probability that she wins the prize?

Give your answer as a fraction in its simplest form.

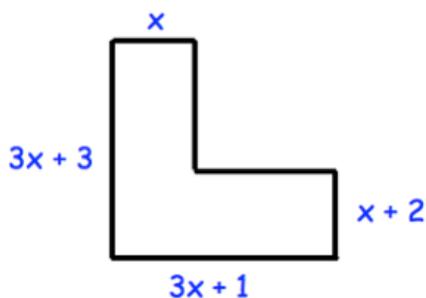
James drives 164km.

It takes 2 hours 30 minutes.

Work out his speed.

Write down the nth term for this sequence

10 7 4 1 ... ..



Write an expression for the perimeter

**14th August**

Corbettmaths

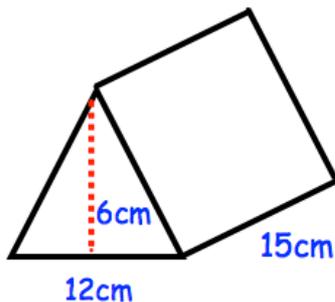
Increase 40kg by 20%

A ferry leaves a port every 15 minutes,  
starting at 09:00

The last ferry leaves at 16:30

How many times does a ferry leave the  
port during one day?The  $n$ th term of a sequence is  
 $n^2 - 1$ 

Work out the first 5 terms



Find the volume

Calculate the  $n$ th term of:

10 13 16 19 ... ..

Find the 200th term.

**15th August**

Corbettmaths

100 people play a game that costs £1.

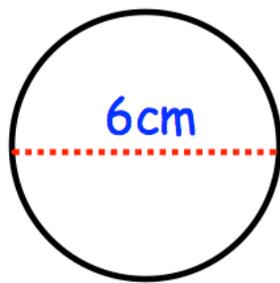
The probability of winning is 0.1

The prize is £4.

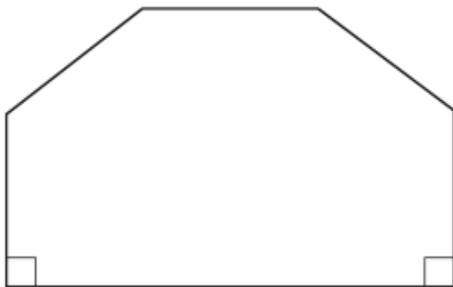
Calculate how much profit the game makes.

4kg of tomatoes is £4.80

How much does 3kg cost?



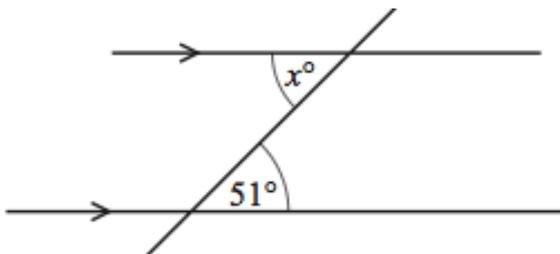
Calculate the circumference of this circle, to one decimal place.



The front of a house is in the shape of a hexagon with two right angles.

The other four angles are all the same size.

Calculate the size of one of these angles.



Find  $x$

Reason

**16th August**

Corbettmaths

A class has 30 students and 21 are girls. Find the ratio of boys to girls in its simplest form.

Simplify

$$3a + 3a + 3a$$

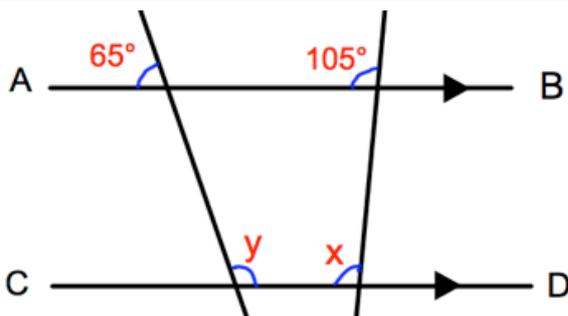
Simplify

$$4a + 8c + 2a + 2c$$

The  $n$ th term of a sequence is

$$4n + 3$$

Work out the first 5 terms

Find  $x$ Find  $y$ 

Calculate the area of the trapezium



**17th August**

Corbettmaths

Write the next two terms

0.8 0.4 0.2 ....

Write the next two terms

1 5 25 ....

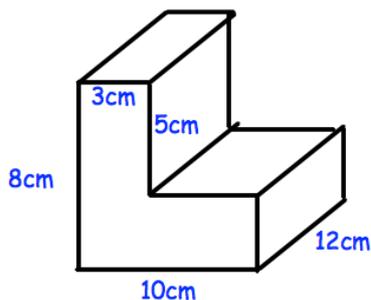
Expand  $6(x - 2)$ 

$$\frac{5}{6} - \frac{1}{2}$$

|        | French | Art |
|--------|--------|-----|
| Female | 8      | 3   |
| Male   | 7      | 3   |

A student is chosen at random.

What is the probability they study French?

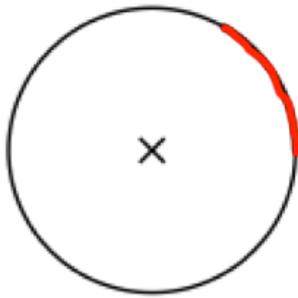


Calculate the volume of the prism.

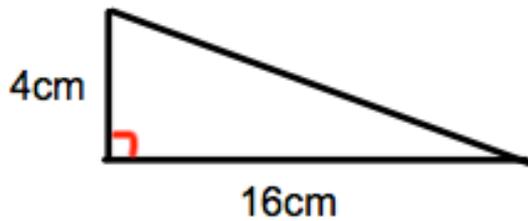
18th August



Corbettmaths



What part of the circle is shown? (in red)



Find the area of the triangle.

Simplify

$$y^2 + y^2 + y^2$$

Arrange in order, from smallest to largest.

$$\frac{1}{3} \quad \frac{7}{12} \quad \frac{3}{4}$$

Find the nth term

$$1, 1.5, 2, 2.5, \dots$$

Find the 20th term.

**19th August**

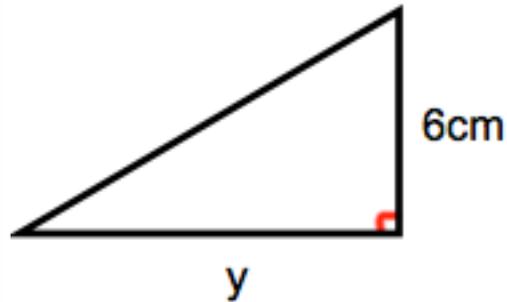
Corbettmaths

Carol claims “when you square a number, the answer is always bigger than the number you started with.”

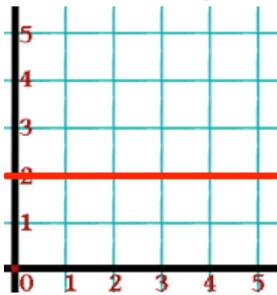
Is she correct? Explain your answer.

The area of a triangle is  $30\text{cm}^2$

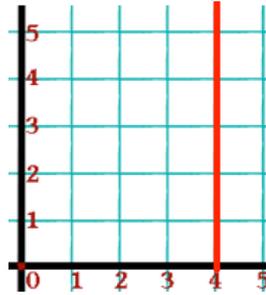
Find  $y$



What is the equation of this line?

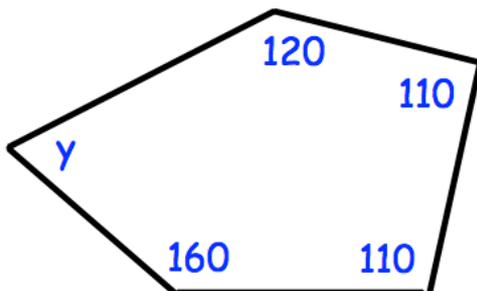


What is the equation of this line?



$$\begin{array}{r} 49.1 \times 8.08 \\ \hline 3.98 \end{array}$$

Work out an estimate



Find  $y$

**20th August**

Corbettmaths

List the prime numbers between 20 and 40.

When Ali takes a penalty

the probability that he will score a goal is  $\frac{4}{5}$ .

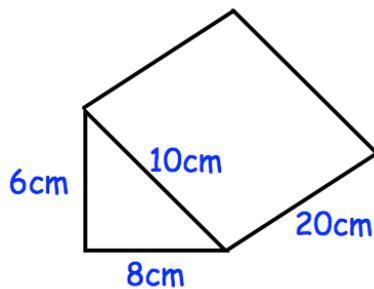
Ali takes 30 penalties, how many times is he expected to score a goal.

There are red, green and white counters in a bag.

$\frac{3}{8}$  of the counters are red.

$\frac{1}{6}$  of the counters are green.

What fraction of the counters are white?



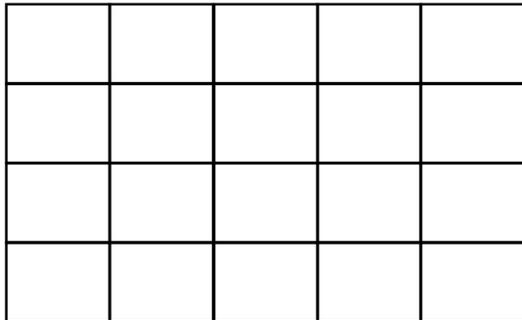
Calculate the volume

Expand  $4(x + 3)$

21st August



Corbettmaths

 $2^3$  $\sqrt[3]{27}$ 

Shade in squares so that the grid has:

- no lines of symmetry
- order of rotational symmetry 2

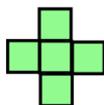
Find the missing terms.

14 \_\_\_ 20 \_\_\_ 26

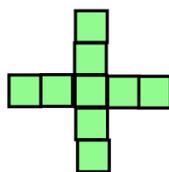
Patten 1



Patten 2



Patten 3



Draw Pattern 4 below

How many squares will be in pattern 10?

Write an expression for the number of squares in pattern n

**22nd August**

Corbettmaths

There are 125 students in Year 11.

The number of pupils in Year 11 is one-fifth of the total number of pupils in the school.

Work out the total number of pupils in the school.



Enlarge P by scale factor 3

Simplify

$$y^5 \times y^2$$

Simplify

$$y^{10} \div y^2$$

Expand and simplify

$$4(y + 3) + 3(y + 2)$$

In a triangle, the ratio of the angles a, b and c is 1:2:3

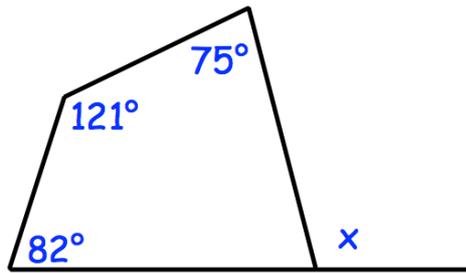
What is the size of each angle?

23rd August

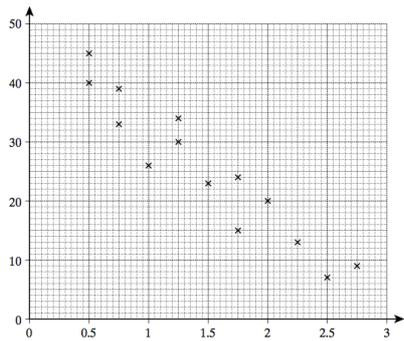


Corbettmaths

Write 0.4 as a fraction in its simplest form.



Find x



What type of correlation is shown?

Henry buys a car that costs £8000.

He pays a 20% deposit and pays the rest of the money over 20 monthly payments.

How much is each payment?

Make g the subject

$$a = \sqrt{g}$$

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

5-a-day

Foundation

**24th August**

Corbettmaths

Write the mode of these numbers

3 9 3 9 8 9 3 3

Solve:

$6x = 30$

Solve:

$2x + 1 = 19$

$$\frac{3}{4} + \frac{1}{12}$$

| Country | Frequency |
|---------|-----------|
|---------|-----------|

|         |   |
|---------|---|
| England | 5 |
|---------|---|

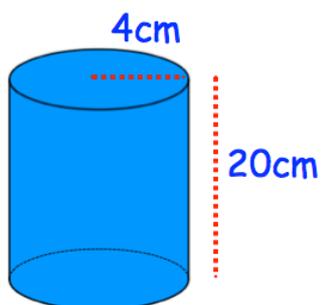
|         |    |
|---------|----|
| Ireland | 15 |
|---------|----|

|          |    |
|----------|----|
| Scotland | 10 |
|----------|----|

|       |   |
|-------|---|
| Wales | 6 |
|-------|---|

Ivan wants to draw a pie chart.

Work out the size of each angle.



Calculate the volume

**25th August**

Corbettmaths

**PRINT CHARGES**

3p per page  
85p for the cover

A book costs £4.45

How many pages are in the book?

Find the angle between the hands of a clock at 1pm

Find the angle between the hands of a clock at 4pm

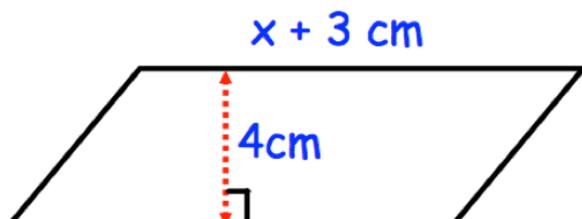
If  $y = -4$  and  $x = 2$ , work out the value of:

$$\frac{y + 20}{x}$$

 $\$1.50 = \pounds 1$ 

A pairs of trousers costs \$45.

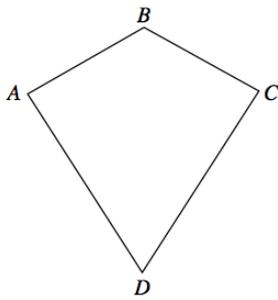
Work out the cost in pounds.

The area of the parallelogram is  $32 \text{ cm}^2$ Find  $x$ .

26th August



Corbettmaths



Is AB parallel to CD?

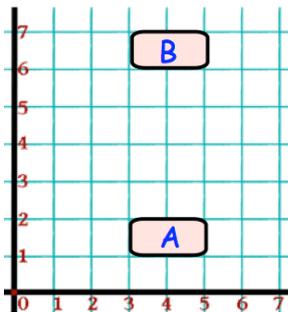
Does Angle A = Angle C?

Convert 0.14 into a fraction in its simplest form.

Convert 80% into a fraction in its simplest form.

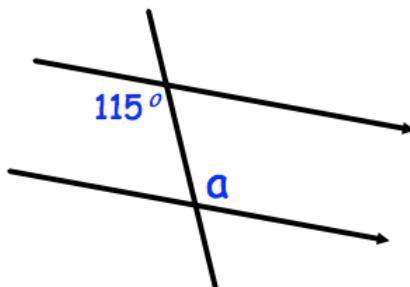
Martin and Laura share 415 sweets in the ratio 1:4.

How many sweets does Laura receive?



B is a reflection of A.

What is the equation of the mirror line?



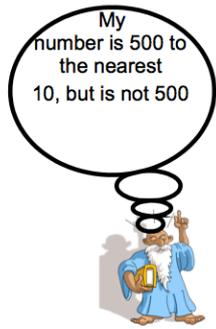
Size of a?

Reason?

| 27th August   |  |
|---|--|
| Simplify<br>$3y \times 2y$  | Simplify<br><br>Corbettmaths<br>$\frac{25xy}{5x}$ |
| $\frac{3}{5} - \frac{2}{7}$   |  |
| Factorise<br>$8y + 10$  |  |
| 20% of a number is 4.<br>What is the number?  | 30% of a different number is 15.<br>What is the number?  |
| The mean of four numbers is 6.<br>Three of the numbers are 1, 3 and 8.<br>Work out the fourth number. |  |

**28th August**

Corbettmaths



What could his number be?

**Expand and simplify**

$$4(y + 3) - 3(y + 2)$$

Two spinners have the equal size sections with the numbers 1, 2, 3 and 4.

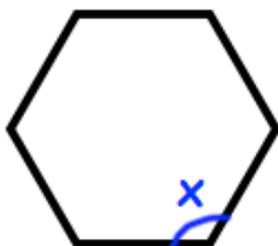
They are spun and the two numbers are multiplied together.

Complete the table to show all the possible totals.

|   | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1 |   |   |   |   |
| 2 |   |   |   |   |
| 3 |   |   |   |   |
| 4 |   |   |   |   |

What is the probability of the total being 2?

What is the probability of the total being under 6?



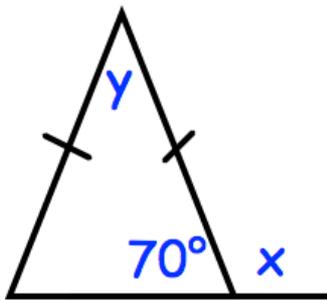
What is the size of each interior angle in a regular hexagon

**29th August**

Corbettmaths

Connor's watch is four minutes fast.  
Jo's watch is five minutes slow.

What time is shown on Jo's watch  
when Connor's watch shows 13:04



Find x

Find y

Martin asked 6 friends their age.

21 28 28 28 29 30

If a seventh friend has an age of 34,  
will the mode decrease, increase or  
stay the same?

Factorise

$6y + 27$

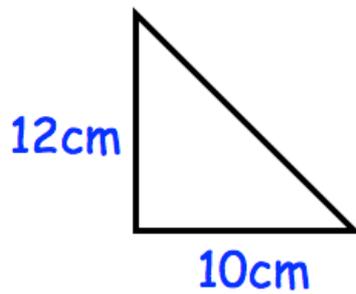
A mother's and daughter's ages are in  
the ratio 7:2

If the daughter is 14, how old is the  
mother?

30th August



Corbettmaths



Find the area of this right angle triangle

$$£1 = \$1.50$$

Nicola changes £20 into dollars.

How much will she get?

What fraction is halfway between

$$\frac{2}{5} \quad \text{and} \quad \frac{9}{10}$$

$$£1 = €1.25$$



€50

This watch costs €50 in Lisbon.  
The same watch costs £35 in London.

Which is cheaper?

500ml of shampoo costs 78p  
1.25 litres of shampoo costs £2

Which is better value?

**31st August**

Corbettmaths

Simplify

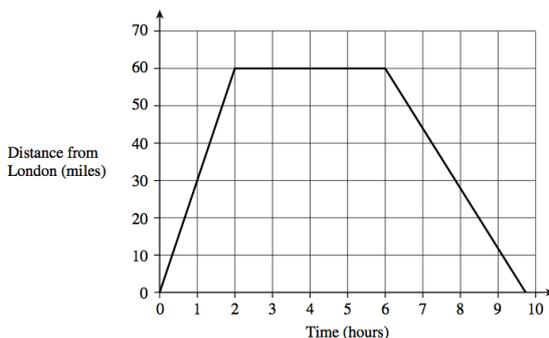
$$9(5y + 3) - 4$$

The ratio of red beads to white beads on a necklace is 5:2.

What fraction of the beads are white?

There are 60 red beads, how many white beads are there?

Expand  $5(x + 3)$



David lives in London.  
He visited his aunt and then returned home.

How long did he stay at his aunt's?

How far away from London does his aunt live?

How far his David travel?