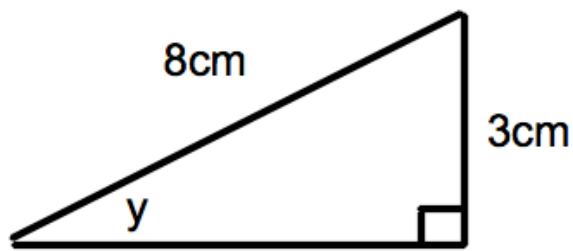
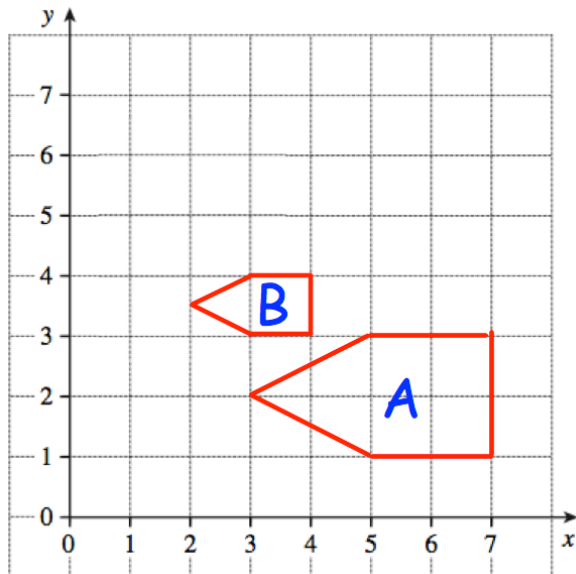


1st August

Corbettmaths

Calculate angle y 

Describe fully the single transformation that maps shape A onto shape B.

Reflect shape B using $x = 4$ as the mirror line

There are three colours of beads in a bag.

The ratio of red to yellow beads is 8:3

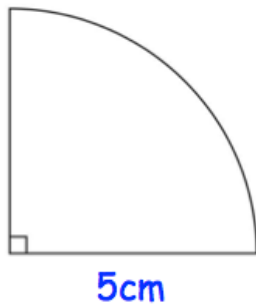
The ratio of green to yellow beads is 9:2.

What fraction of the beads are green?

Work out the reciprocal of 20.
Give your answer as a decimal

2nd August

Corbettmaths



Calculate the area of this quarter circle

The time, T , taken to serve the guests at a wedding is inversely proportional to the number of waiters, w .

Explain why.

The time is calculated by

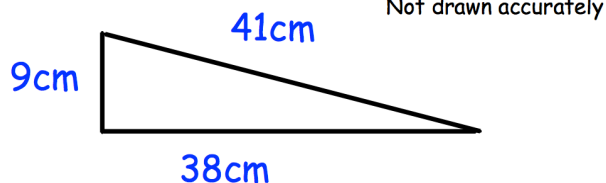
$$T = \frac{300}{w}$$

Work out how long it would serve the guests if there were 45 waiters.

The density of Nitrogen is

$$1.25 \times 10^{-6} \text{ kg/cm}^3$$

Calculate the mass of one cubic metre of Nitrogen.



Is this triangle a right angled triangle?

3rd August

Corbettmaths

Solve $(x + 3)(x + 5) = 0$

Mrs Reed buys a car costing £11760
This cost includes VAT at a rate of 20%.

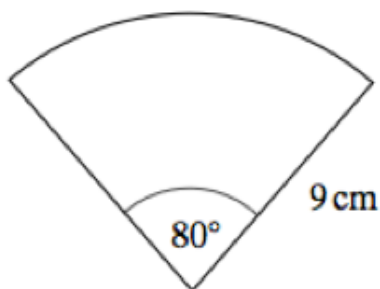
How much is the car without VAT?

150 students visit a school canteen.


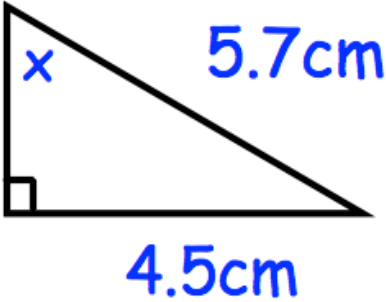
Some students have packed lunches.
Some students have a cooked lunch.

56 out of the 89 students who have packed lunch are female.
There are 72 boys.

Work out how many females have a cooked lunch.



Calculate the area of the sector

4th August	
Solve $\frac{7x-3}{2} = 2x+9$	 Corbettmaths
	Find x.
Solve the simultaneous equations $2x - 5y = 1$ $8x + 3y = 27$	
Find the volume of a piece of wood that has a mass of 600g and density of 0.75g/cm^3	
0.84 has been rounded to two decimal places. Write down an inequality to show the range of possible actual values.	

5th August

Corbettmaths

Write in standard form

$$120 \times 10^8$$

Write in standard form

0.00000000000034

In the space below, draw a 80° angle.
Construct the angle bisector.

The circumference of a circle is 60cm.
Work out the area of the circle.

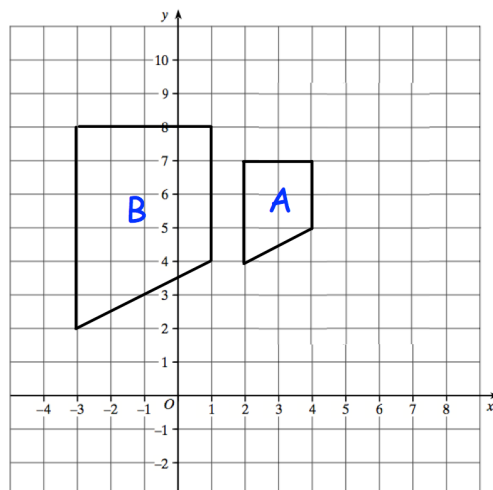
A rectangular field is 20 metres longer than wide.

The perimeter of the field is 280m.

Find the area of the field.

6th August

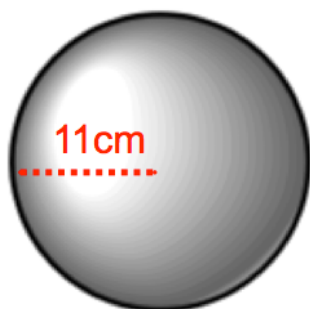
Corbettmaths

Solve $x^2 + x - 6 = 0$ 

Describe fully the single transformation that maps shape B onto shape A.

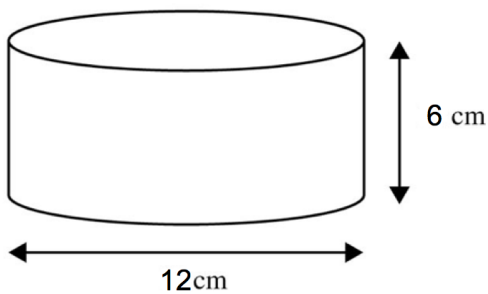
 $\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$ $A = \{\text{numbers less than } 6\}$ $B = \{\text{prime numbers}\}$

Draw a Venn diagram for this information.

Calculate the volume of the sphere.
Give your answer to 1 decimal place.

7th August

Corbettmaths

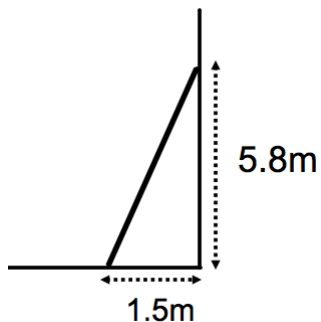


Calculate the volume.
Give your answer in terms of π

A light flashes every 50 seconds.
A buzzer buzzes every 3 minutes.

They both operate, how long until they both operate again?

Calculate the density of a piece of wood with a mass of 80g and a volume of 90cm^3



A ladder is placed against a wall.
To be safe, it must be inclined at between 70° and 80° to the ground.

Is the ladder safe?

Calculate the length of the ladder.

8th August

Corbettmaths

Expand and simplify $6(w + 3) - 2(w - 5)$

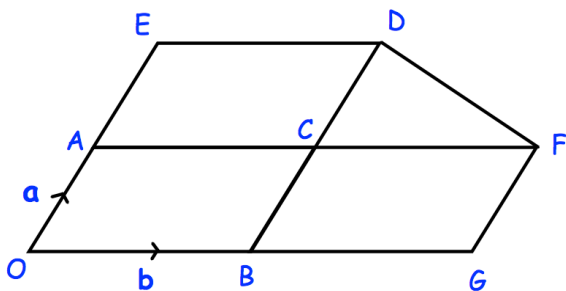
$$6w + 18 - 2w - 10$$

$$= 4w + 8$$

Can you spot any mistakes?

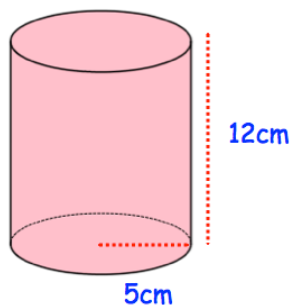
Four chairs and two tables cost £218.
Six chairs and seven tables cost £587.

Find the cost of buying twenty chairs and five tables.

Express in terms of **a** and **b** the vector \overrightarrow{OC}

A cube with side length 8cm is placed on the ground. The pressure exerted on the ground is 4N/cm^2 .

What force does the cube exert on the ground?

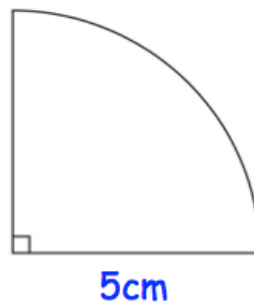


Calculate the surface area

9th August

Corbettmaths

Calculate the perimeter of this quarter circle



The mean of four numbers is 10.
Three of the numbers are 9, 11 and 7.
Work out the fourth number.

Input \rightarrow $\boxed{\times \frac{3}{4}}$ \rightarrow $\boxed{\div \frac{2}{3}}$ \rightarrow **Output**

Find the output if the input is 5

Factorise $x^2 + 10x + 9$

Match each of the following

$4x + y$ ————— Expression

$x + x + x = 3x$ Equation

$5x - 2 = 28$ Formula

$V = lwh$ Identity

10th August

Corbettmaths

The table shows the probabilities that a sweet taken from a jar will be red, pink or purple.

Colour	Red	Pink	Purple
Probability	0.4	0.25	

There are 4000 sweets
How many are purple?

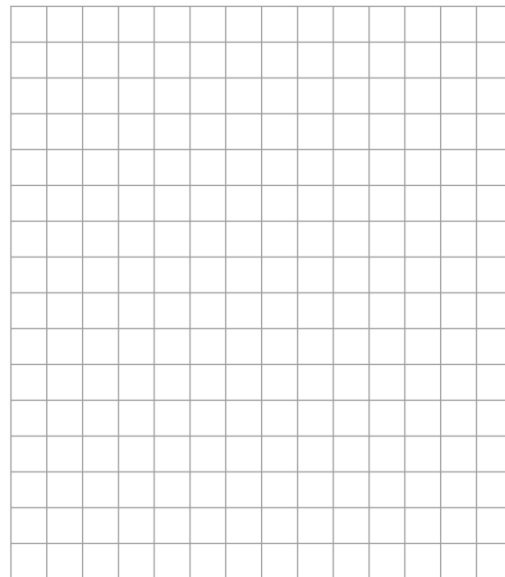
Simplify

$$2a^3c^3 \times 3a^2c$$

$$y = x^3$$

Complete the table of values and draw a graph

x	-2	-1	0	1	2
y					



Solve

$$2x - 3y = 7$$

$$3x + 5y = 1$$