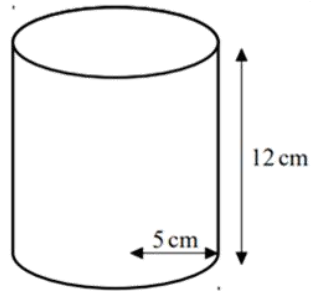


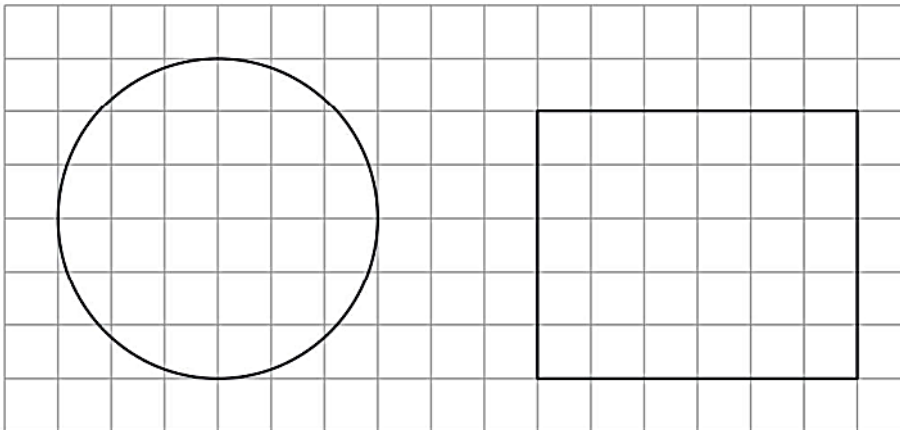
A cylinder has a radius of 5 cm and a height of 12 cm.

Work out the volume of the cylinder.
Give your answer in terms of π .



WE DO

The centimetre grid shows the plan and the front elevation of a cylinder.

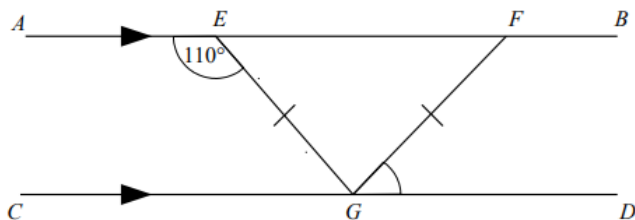


Plan

Front elevation

Work out the volume of the cylinder.
Give your answer in terms of π

YOU DO



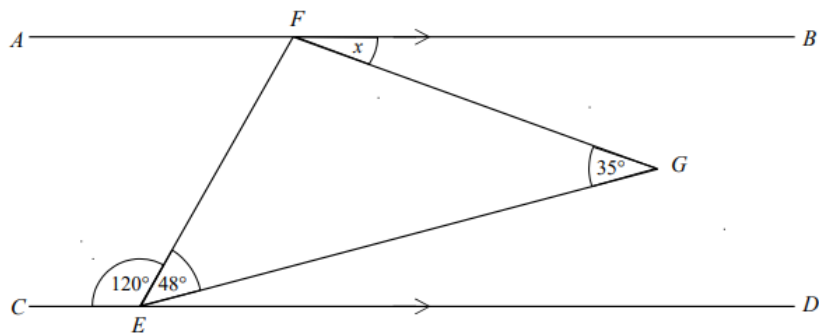
WE DO

AB and CD are parallel lines.
 EFG is an isosceles triangle

Angle $AEG = 110^\circ$

Find the size of angle FGD .

Give a reason for each stage of your working.



YOU DO

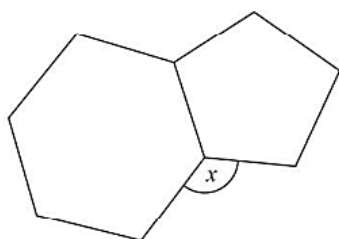
AB and CD are parallel.

Find the size of angle x .

Give a reason for each stage of your working.

Here is a regular hexagon and a regular pentagon.

WE DO

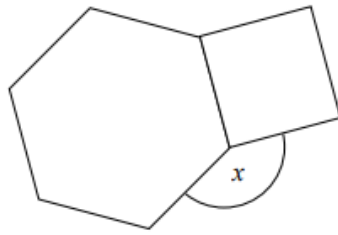


Work out the size of the angle marked x .

You must show all your working.

YOU DO

Here is a regular hexagon and a square.



Work out the size of the angle marked x .
You must show all your working.

WE DO

A delivery company has a total of 160 cars and vans.

the number of cars : the number of vans = 3 : 7

Each car and each van uses electricity or diesel or petrol.

$\frac{1}{8}$ of the cars use electricity.

25% of the cars use diesel.

The rest of the cars use petrol.

Work out the number of cars that use petrol.

You must show all your working.

YOU DO

A delivery company has a total of 240 cars and vans.

the number of cars : the number of vans = 7 : 3

Each car and each van uses electricity or diesel or petrol.

$\frac{3}{8}$ of the vans use electricity.

25% of the vans use diesel.

The rest of the vans use petrol.

Work out the number of vans that use petrol.

You must show all your working.

(a) Write 2.36×10^{-4} as an ordinary number.

WE DO

(b) Write 127 000 in standard form.

(c) Work out $(5 \times 10^2) \times (7 \times 10^{-4})$
Give your answer in standard form.

(a) Write 1.63×10^{-3} as an ordinary number.

YOU DO

(b) Write 438 000 in standard form.

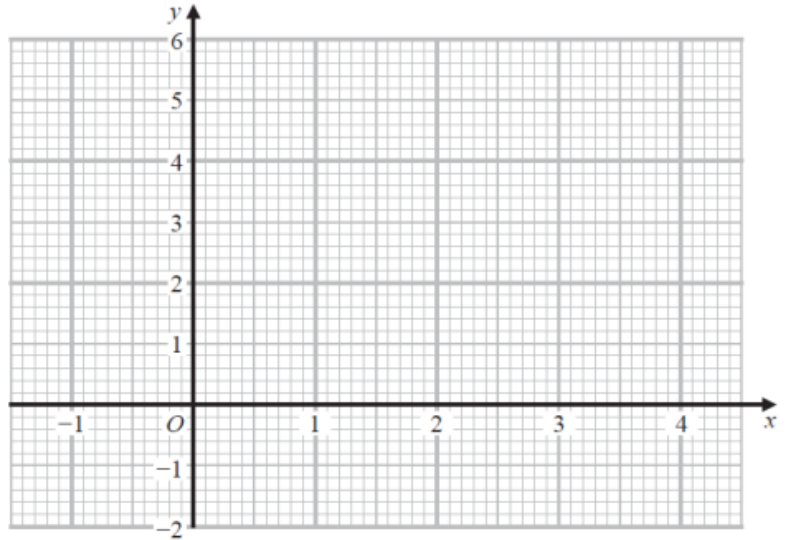
(c) Work out $(4 \times 10^3) \times (6 \times 10^{-5})$
Give your answer in standard form.

(a) Complete the table of values for $y = x^2 - 3x + 1$

WE DO

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

(b) On the grid, draw the graph of $y = x^2 - 2x + 3$ for values of x from -1 to 3



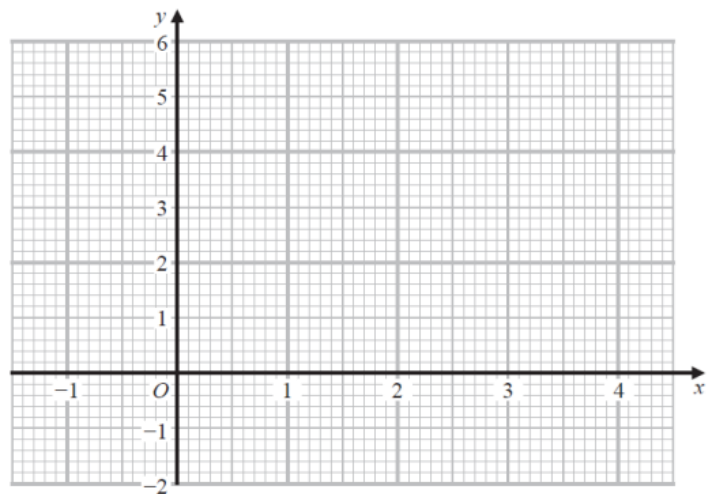
(c) Using your graph, find estimates for the solutions of the equation $x^2 - 2x + 3 = 4$

(a) Complete the table of values for $y = x^2 - 2x + 3$

YOU DO

x	-1	0	1	2	3
y		3	2		

(b) On the grid, draw the graph of $y = x^2 - 2x + 3$ for values of x from -1 to 3



(c) Using your graph, find estimates for the solutions of the equation $x^2 - 2x + 3 = 4$