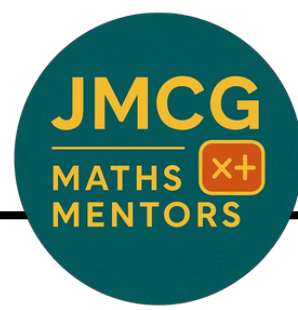


## M2 Test 3

Name:



Questions are ordered by increasing difficulty. If you are confused, please rewatch the lesson recording before contacting your tutor. Please submit the assignment prior to the deadline to allow time for marking and corrections. Please attempt all questions.

1. Find the lowest common multiple (LCM) of 70 and 56

280

2. The normal price of a train ticket from Ashford to London is £34.20

Ross gets  $\frac{1}{3}$  off the price of his train ticket

Work out how much Ross pays for his ticket.

£22.80

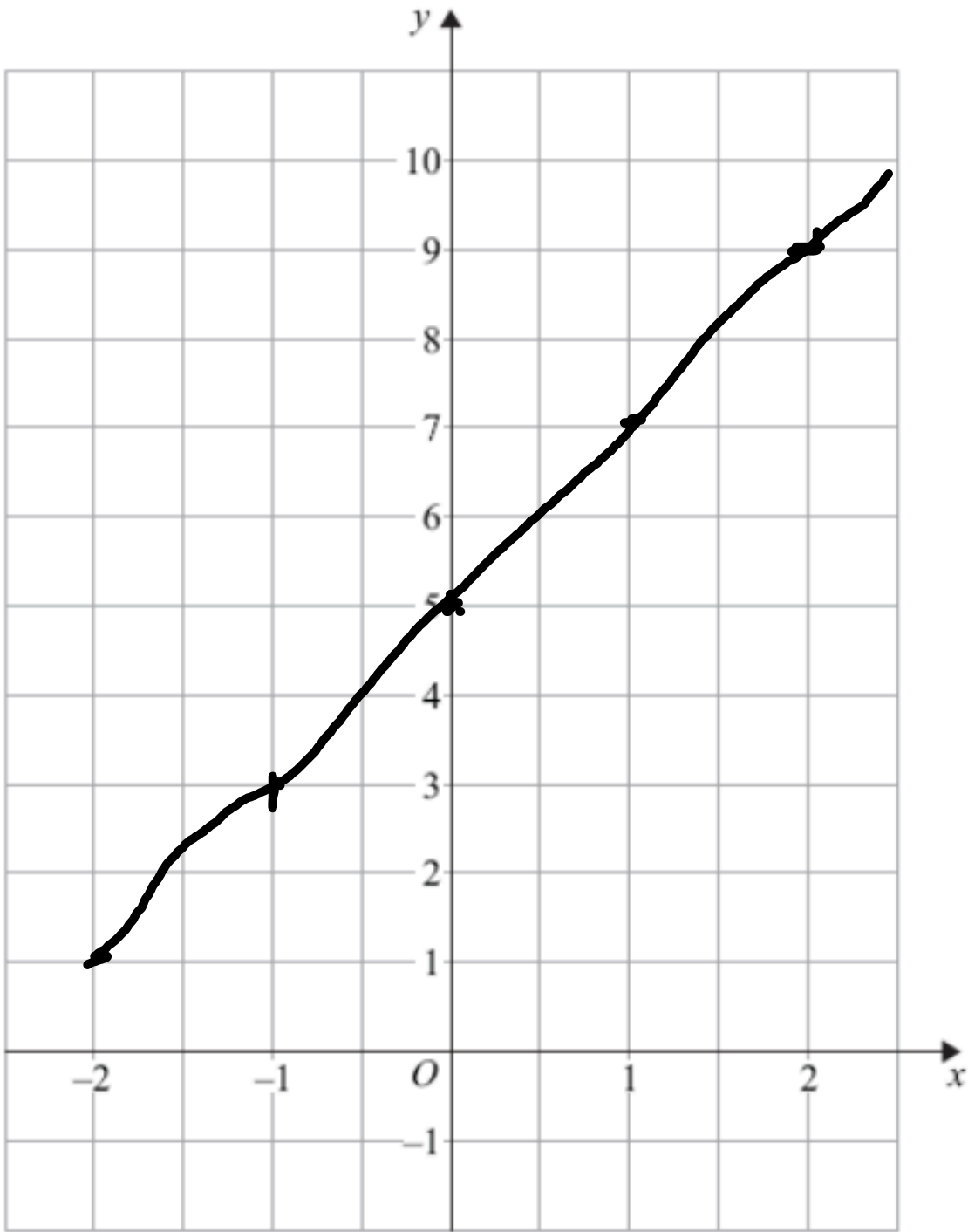
3

(a) Complete the table of values for  $y = 2x + 5$

$x$	-2	-1	0	1	2
$y$	1	3	5	7	9

(2)

(b) On the grid, draw the graph of  $y = 2x + 5$  for values of  $x$  from  $x = -2$  to  $x = 2$



(2)

4.

In a sale, the normal price of a boat is reduced by 15%  
The sale price of the boat is £272 000

Work out the normal price of the boat.

$$0.85 \times X = 272000$$

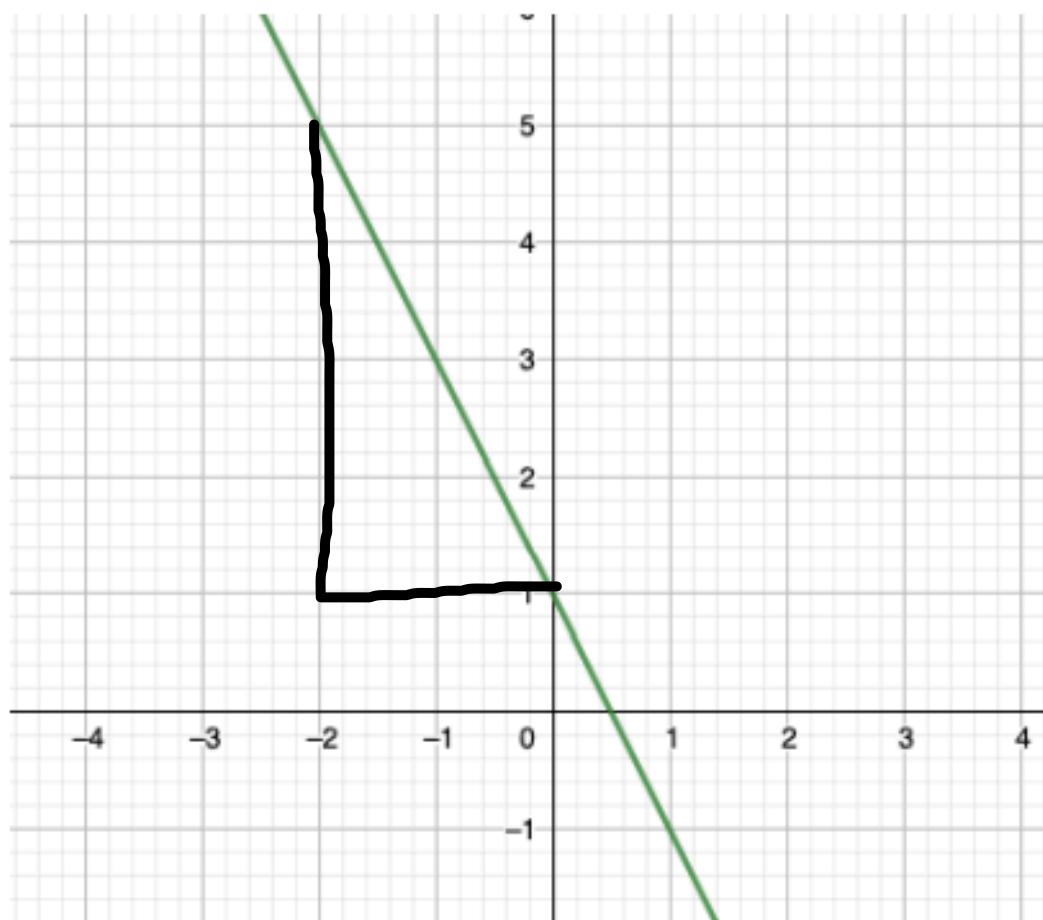
$$272000$$

\_\_\_\_\_

$$0.85 = 320000$$

5.

. Find the gradient of the line given below:



1.5

6.

Solve

$$x + 7 = -3$$

$$x = 10$$

$$x = \dots\dots\dots$$

Solve

$$5y + 3 = 15$$

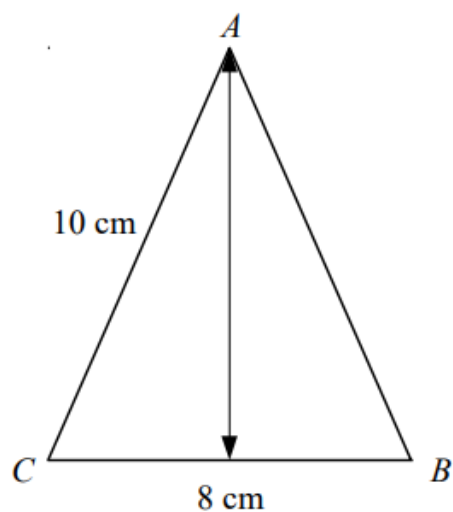
$$2.4$$

$$y = \dots\dots\dots$$

7.

$ABC$  is an isosceles triangle.

Calculate the perpendicular height of  $ABC$ .  
Give your answer correct to 3 significant figures..



9.17

.....cm

8.

The diagram shows a trapezium of height 3 m.

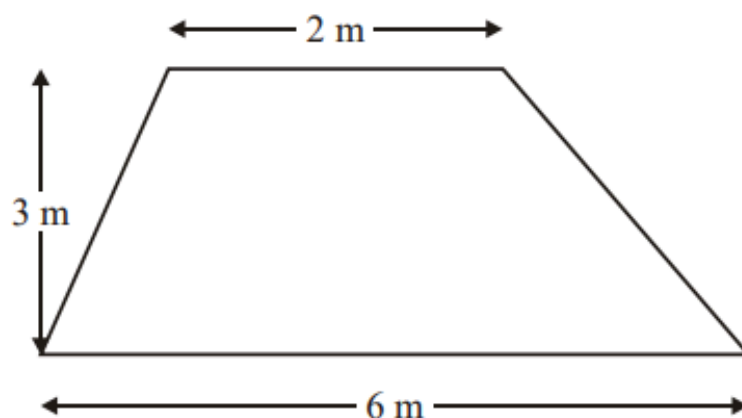


Diagram **NOT**  
accurately drawn

Find the area of this trapezium

State the units with our answer.

12m

9.

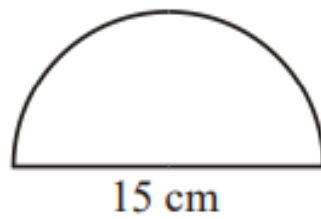


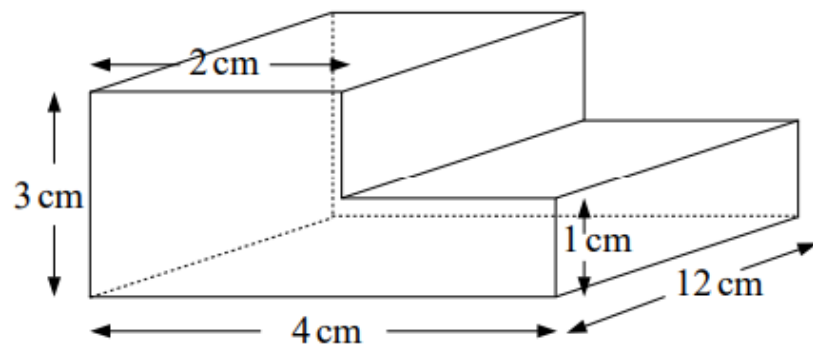
Diagram **NOT**  
accurately drawn

The diagram shows a semi-circle.  
The diameter of the semi-circle is 15 cm.

Calculate the area of the semi-circle.  
Give your answer correct to 3 significant figures.

?

10



The diagram shows a prism.

Work out the volume of the prism.

36cm



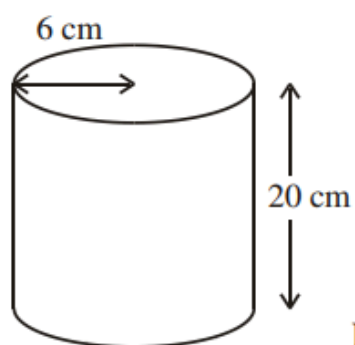


Diagram **NOT** accurately drawn

A solid cylinder has a radius of 6 cm and a height of 20 cm.

Calculate the volume of the cylinder.

Give your answer correct to 3 significant figures.

..... cm<sup>3</sup>

2260cm