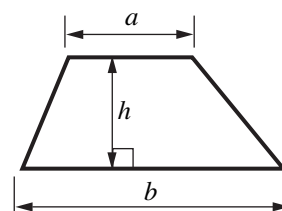
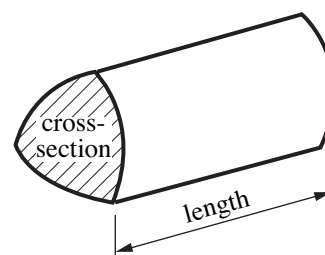


Formulae Sheet

Area of trapezium = $\frac{1}{2}(a + b)h$



Volume of prism = (area of cross-section) \times length



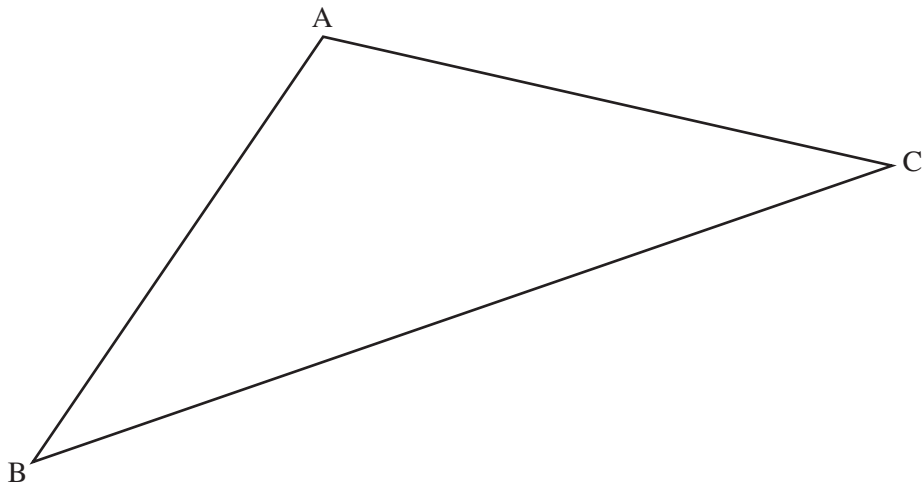
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- 8 Work out the reciprocal of 40.
Give your answer as a decimal.

..... [1]

1	
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- 9 In this question you must use ruler and compasses only.
Show all your construction lines.



- (a) Construct the perpendicular bisector of BC. [2]
- (b) Show clearly the point inside triangle ABC which is equidistant from B and C and 2 cm from A.
Label this point D. [2]

4	
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- 10** The cost of net curtain material is proportional to the length of the material.

Complete the table below.

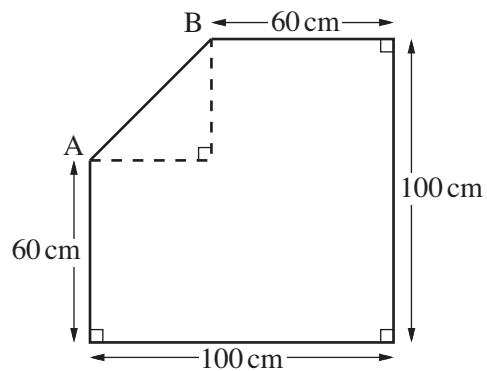
Length	4 m	5.2 m m
Cost	£15.40	£	£9.24

[4]

4

- 11** Rebecca is designing a new kitchen.

This is the plan view of a corner unit with measurements as shown.



Not to scale

Calculate the distance AB.

..... cm [4]

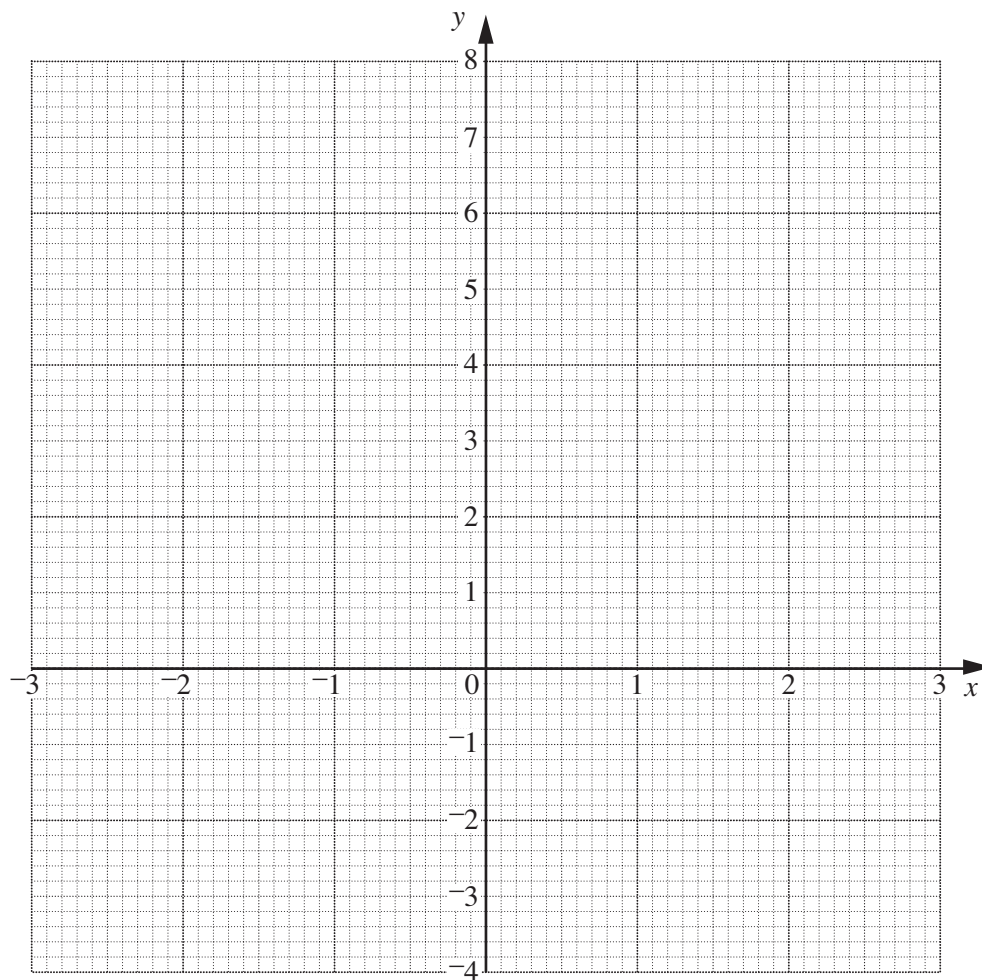
4

12 (a) Complete the table below for $y = x^2 - 2$.

x	-3	-2	-1	0	1	2	3
y	7			-2			7

[2]

(b) Draw the graph of $y = x^2 - 2$.



[2]

(c) Find the values of x where the graph crosses the x -axis.

(c) [2]

- 13 (a)** A health club records how long members spend in the gym one day. This table summarises the results for 154 members.

Time (x minutes)	Frequency
$0 < x \leq 30$	25
$30 < x \leq 60$	24
$60 < x \leq 90$	92
$90 < x \leq 120$	13

Calculate an estimate of the mean time spent in the gym.

(a)..... minutes [4]

- (b)** Tanya uses the treadmill for a quarter of an hour and walks a distance of 1.3 miles.

At what speed, in miles per hour, has she set the treadmill?

(b) mph [2]

6	
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