

E4.2 2D Shapes: Perimeters & Areas

Question Paper

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Level	Core
Topic	E4. Mensuration (Perimeters, Areas and Volumes)
Sub-Topic	E4.2 2D Shapes: Perimeters & Areas
Booklet	Question Paper

Time Allowed: 41 minutes

Score: /34

Percentage: /100

Grade Boundaries:

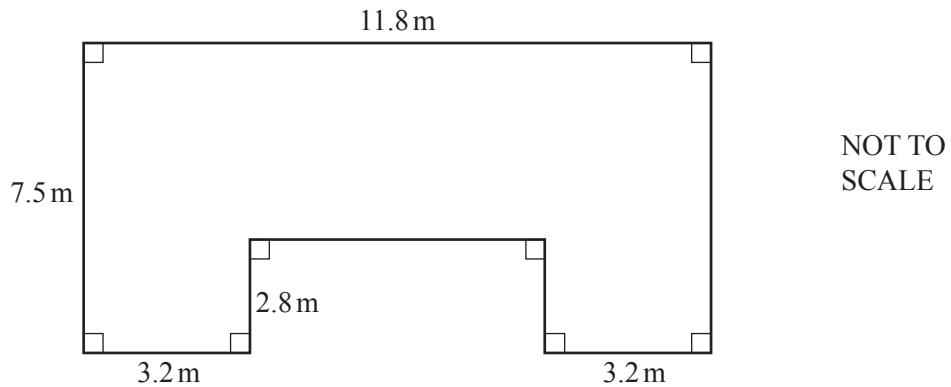
A*	A	B	C	D	E	U
>85%	75%	60%	45%	35%	25%	<25%

Save My Exams! – The Home of Revision

For more awesome GCSE and A level resources, visit us at www.savemyexams.co.uk

1 Jared is building a house.

(a)



The diagram shows the plan of the floor of the house.

(i) Find the area of the floor.

..... m² [3]

(ii) For every square metre of floor area, it costs \$2175 to build the house.

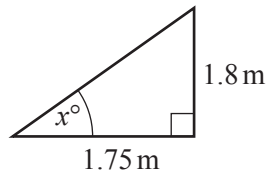
Calculate the cost of building the house.
Give your answer correct to 3 significant figures.

\$..... [2]

Save My Exams! – The Home of Revision

For more awesome GCSE and A level resources, visit us at www.savemyexams.co.uk

(b)



NOT TO
SCALE

The diagram shows a section of the roof.

Using trigonometry, calculate the value of x .

$x = \dots\dots\dots$ [2]

(c) Jared invests \$50 000 for three years at a rate of 2% per year compound interest.

Calculate the total amount Jared receives at the end of the three years.

\$..... [3]

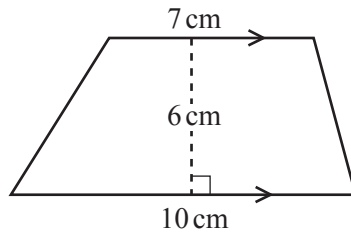
(d) Jared also built an apartment for \$180 000.

He sells it for \$198 000.

Calculate the percentage profit that he makes.

.....% [3]

2



NOT TO SCALE

(a) Calculate the area of the trapezium.

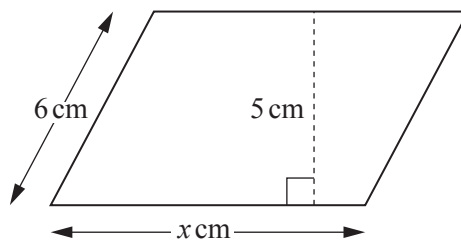
..... cm² [2]

(b) The trapezium is the cross section of a prism.
The length of the prism is 12 cm.

Calculate the volume of the prism.
Give the units of your answer.

..... [2]

3



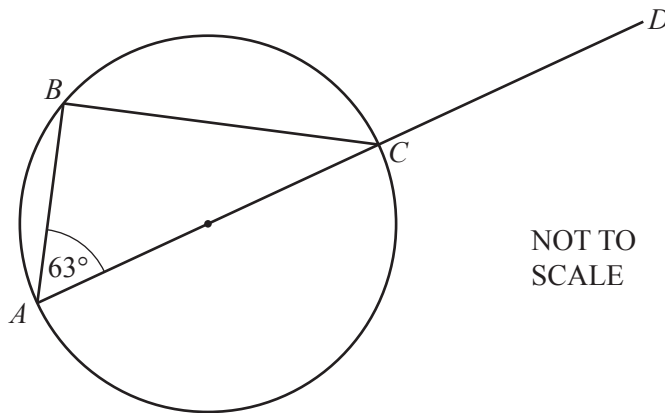
NOT TO SCALE

The area of this parallelogram is 51.5 cm².

Work out the value of x .

$x =$ [2]

4 (a)

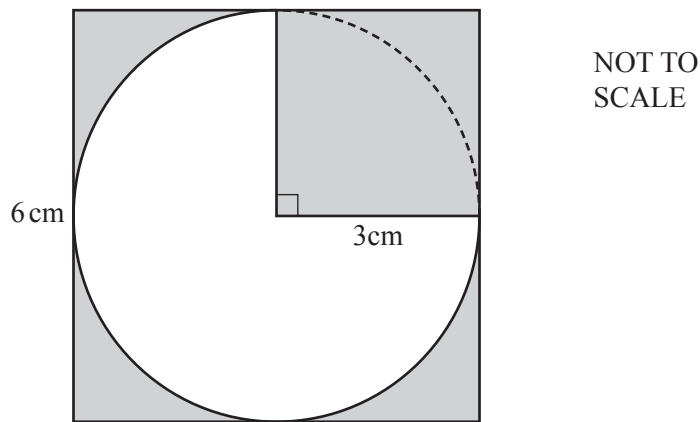


A, B and C lie on a circle with diameter AC .
 AC is extended to D and angle $BAC = 63^\circ$.

Work out angle BCD .
 Give reasons to explain your answer.

Answer(a) Angle $BCD = \dots\dots\dots$ because $\dots\dots\dots$
 $\dots\dots\dots$
 $\dots\dots\dots$ [4]

(b)

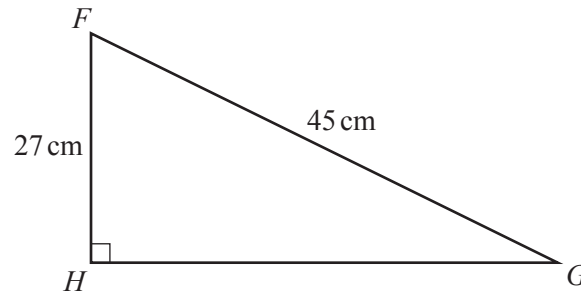


The diagram shows a circle with radius 3 cm inside a square of side 6 cm.

Calculate the shaded area.

Answer(b) $\dots\dots\dots$ cm² [5]

(c)



NOT TO
SCALE

FGH is a right-angled triangle.

Calculate

(i) GH ,

Answer(c)(i) $GH = \dots\dots\dots\text{ cm}$ [3]

(ii) the perimeter of the triangle,

Answer(c)(ii) $\dots\dots\dots\text{ cm}$ [1]

(iii) the area of the triangle.

Answer(c)(iii) $\dots\dots\dots\text{ cm}^2$ [2]
