

# 2D Perimeters & Areas

## Difficulty: Easy

### Question Paper 2

Level	IGCSE
Subject	Maths (0580/0980)
Exam Board	CIE
Topic	Mensuration (Perimeters, Areas & Volumes)
Sub-Topic	2D Perimeters & Areas
Paper	Paper 2
Difficulty	Easy
Booklet	Question Paper 2

**Time allowed:** 31 minutes

**Score:** /24

**Percentage:** /100

#### Grade Boundaries:

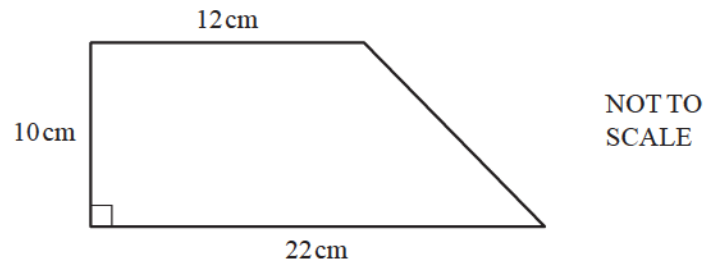
##### CIE IGCSE Maths (0580)

A*	A	B	C	D	E
>88%	76%	63%	51%	40%	30%

##### CIE IGCSE Maths (0980)

9	8	7	6	5	4	3
>94%	85%	77%	67%	57%	47%	35%

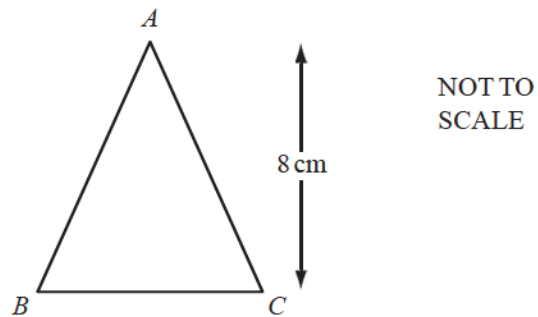
## Question 1



Find the area of the trapezium.

[2]

## Question 2

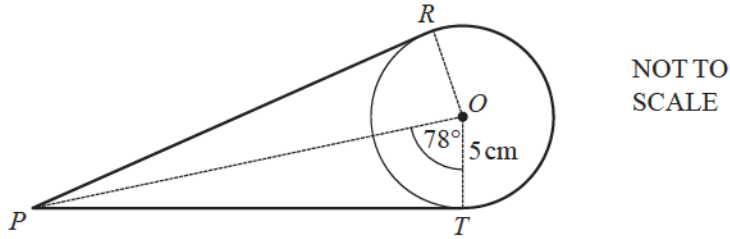


Triangle  $ABC$  has a height of 8 cm and an area of  $42 \text{ cm}^2$ .

Calculate the length of  $BC$ .

[2]

### Question 3



NOT TO  
SCALE

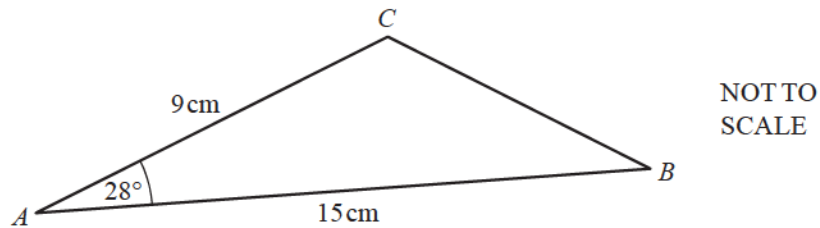
$R$  and  $T$  are points on a circle, centre  $O$ , with radius  $5\text{ cm}$ .  
 $PR$  and  $PT$  are tangents to the circle and angle  $POT = 78^\circ$ .

A thin rope goes from  $P$  to  $R$ , around the major arc  $RT$  and then from  $T$  to  $P$ .

Calculate the length of the rope.

[6]

### Question 4



NOT TO  
SCALE

Calculate the area of triangle  $ABC$ .

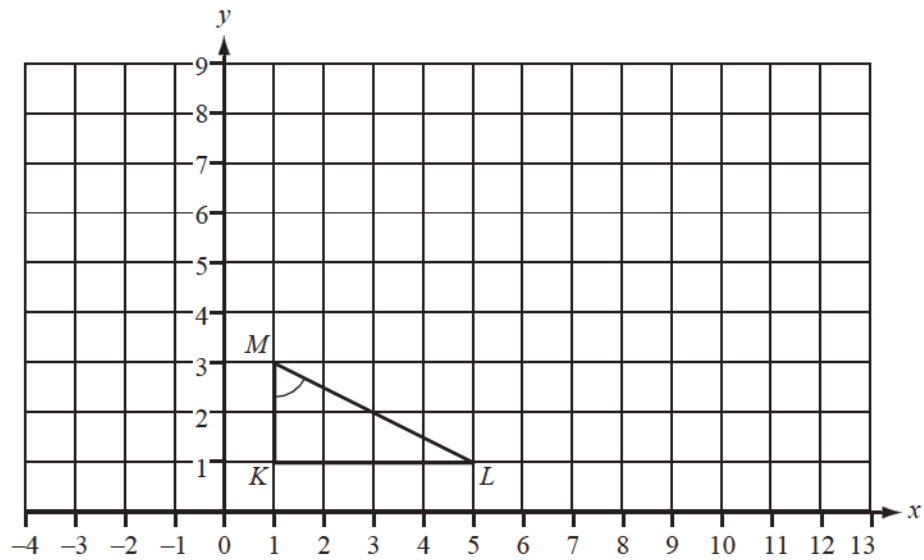
[2]

## Question 5

A large rectangular card measures 80 centimetres by 90 centimetres.  
Maria uses **all** this card to make small rectangular cards measuring 40 **millimetres**  
by 15 **millimetres**.  
Calculate the number of small cards.

[2]

## Question 6



The triangle  $KLM$  is shown on the grid.

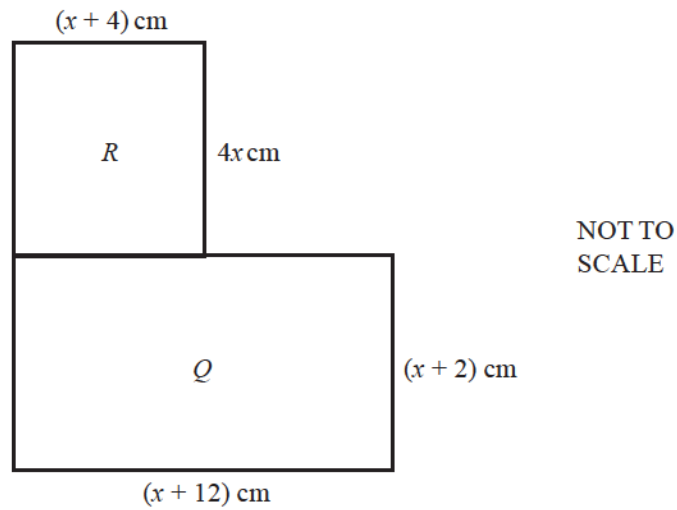
(a) Calculate angle  $KML$ .

[2]

(b) On the grid, draw the shear of triangle  $KLM$ , with a shear factor of 3 and the  $x$ -axis invariant.

[2]

## Question 7



(a) (i) Write down an expression for the area of rectangle  $R$ . [1]

(ii) Show that the total area of rectangles  $R$  and  $Q$  is  $5x^2 + 30x + 24$  square centimetres. [1]

(b) The total area of rectangles  $R$  and  $Q$  is  $64 \text{ cm}^2$ .  
Calculate the value of  $x$  correct to 1 decimal place. [4]