Area of a Triangle (Trigonometry)
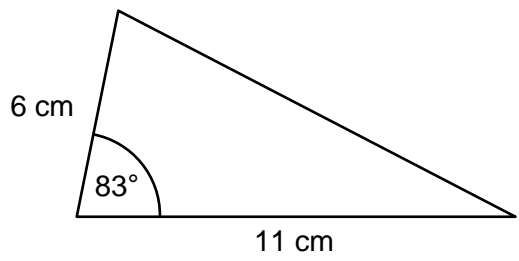
1 Work out the area of the triangle.

6 cm

83°

11 cm

Not drawn accurately

[2 marks]

Answer _____ cm²

2 Work out the area of the triangle.

42°

4.4 cm

3.8 cm

Not drawn accurately

[2 marks]

Answer _____ cm²

$\frac{}{4}$
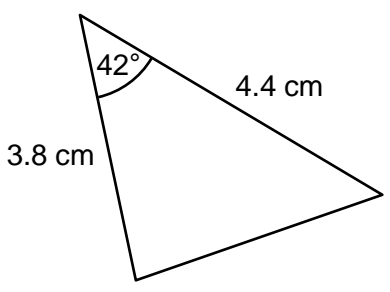
3   Work out the area of the triangle.

9 cm   162°
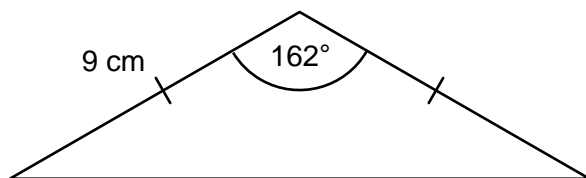
Not drawn
accurately

[2 marks]

Answer _____ cm²

4   Work out the area of the triangle.
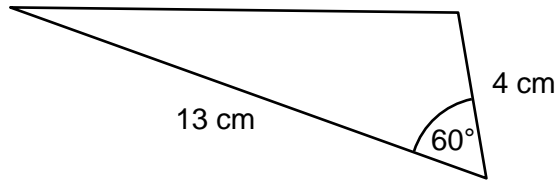
10 cm

Not drawn
accurately

30°

14 cm
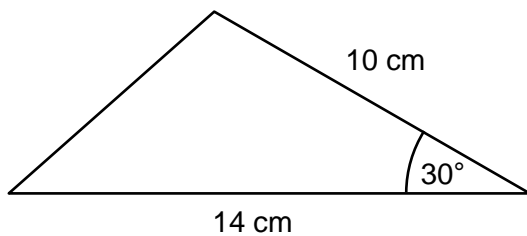
[3 marks]

Answer _____ cm²

5   Work out the area of the triangle.
Give your answer in the form $k\sqrt{3}$, where k is an integer.

13 cm
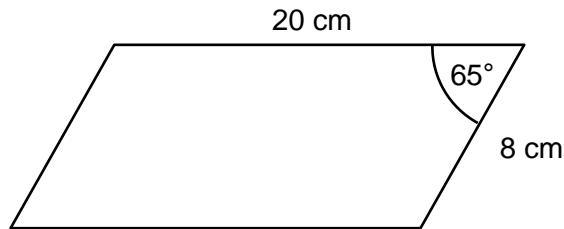4 cm
60°

Not drawn
accurately

[3 marks]

Answer _____ cm²

6   Work out the area of the parallelogram.

20 cm
65°
8 cm

Not drawn
accurately

[3 marks]

Answer _____ cm²

11

Turn over ▶

7 The area of triangle *ABC* is 350 cm²

38°

B

A

19 cm

C
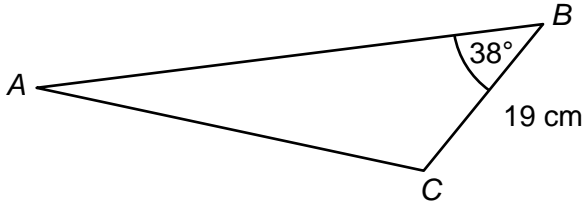
Not drawn accurately

Work out the length of *AB*. **[3 marks]**

Answer _____ cm

8 The area of triangle *ABC* is 23 cm²
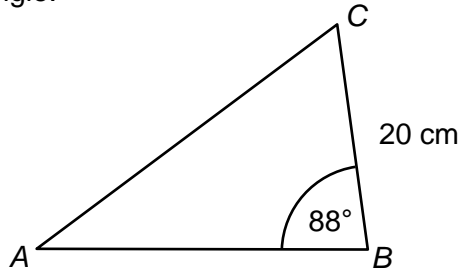

B

9 cm

A

15 cm

C
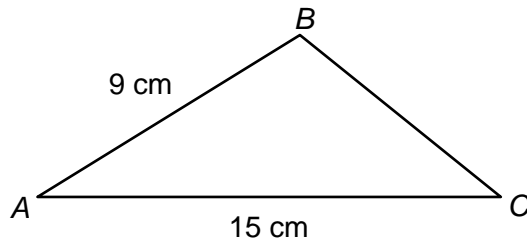
Not drawn accurately

Work out the size of the acute angle, *BAC*. **[3 marks]**

Answer _____ °

9   *ABC* is a triangle.

AB : *BC* = 8 : 5
Work out the area of triangle *ABC*.   **[3 marks]**

_____

_____

_____

_____

Answer _____ cm^2

10   *ABC* is a triangle.
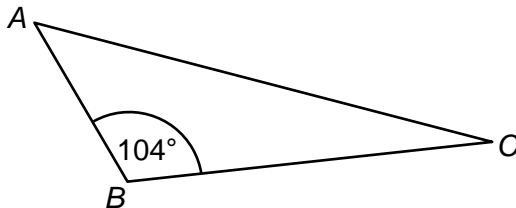
AB : *BC* = 1 : 3
The area of triangle *ABC* is 123 cm^2
Work out the length of *AB*.   **[3 marks]**

_____

_____

_____

_____
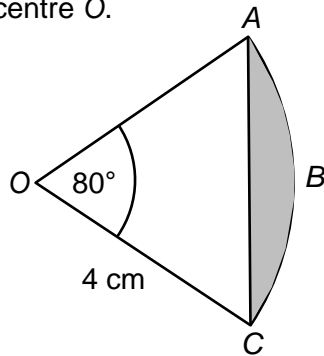
Answer _____ cm

Turn over ▶

12

11   *OABC* is a sector with centre *O*.
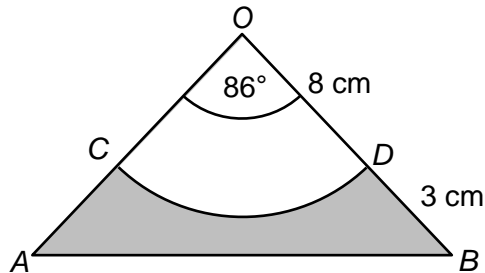

Not drawn accurately

Calculate the area of the shaded region.   **[4 marks]**

Answer _____ cm^2

12   *AOB* is an isosceles triangle with *OA = OB*
COD is a sector, centre *O*.
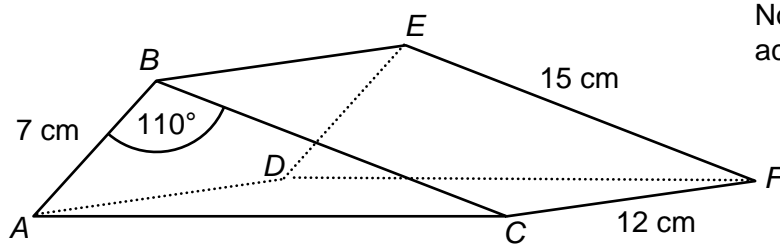

Work out the area of the shaded region.   **[4 marks]**

Answer _____ cm^2

13   *ABCDEF* is a triangular prism.
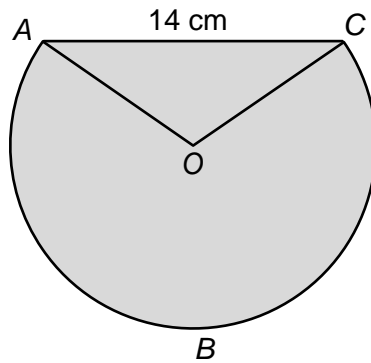

Not drawn accurately

The prism has a mass of 0.5 kg.
Calculate the density of the prism in g/cm^3
Give your answer to 3 significant figures.

[5 marks]

Answer _____ g/cm^3

13

Turn over ▶

14 *ABCO* is a sector with centre *O*.

A   14 cm   C

O

B

Not drawn
accurately

The perimeter of triangle *AOC* is 30 cm.
Calculate the shaded area.

[6 marks]

Answer _____ cm²

6