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

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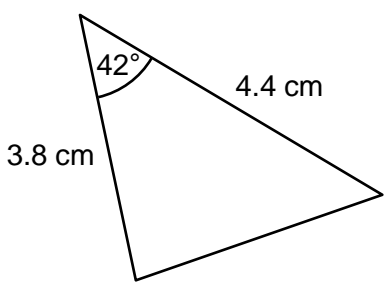
3   Work out the area of the triangle.

9 cm   162°
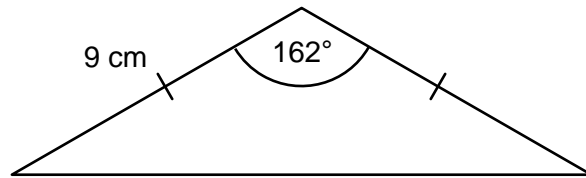
Not drawn
accurately

[2 marks]

Answer _____ cm²

4   Work out the area of the triangle.

10 cm

30°

14 cm
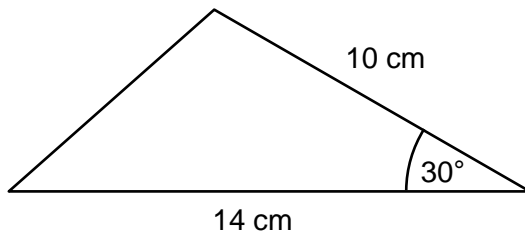
Not drawn
accurately

[3 marks]
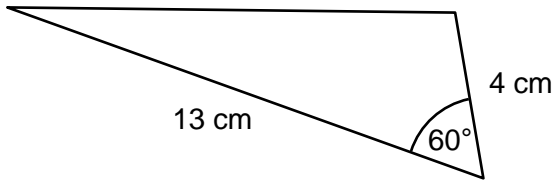
Answer _____ cm²

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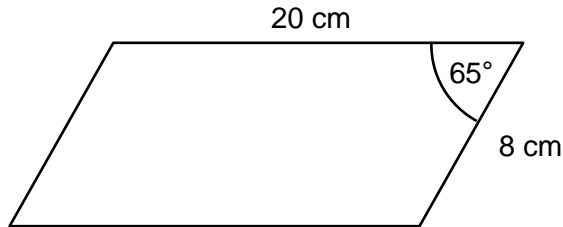
13 cm

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 ▶

Solutions

7 The area of triangle *ABC* is 350 cm²
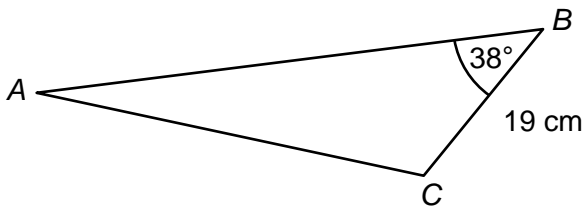
Not drawn
accurately

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

_____

_____

_____

_____

_____

Answer _____ cm

8 The area of triangle *ABC* is 23 cm²
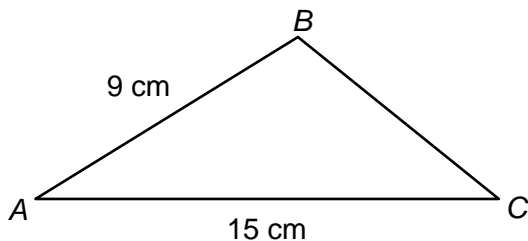
Not drawn
accurately

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

_____

_____

_____

_____

_____

                                                                          °
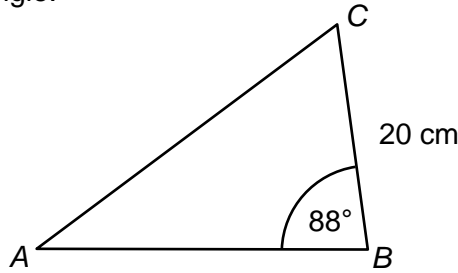
Answer _____

9   *ABC* is a triangle.

20 cm

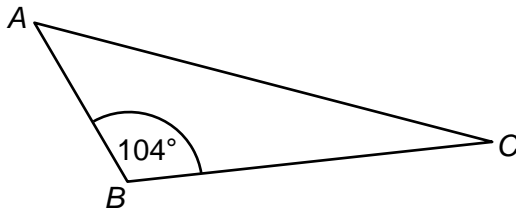Not drawn accurately

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

Answer _____ cm²

10   *ABC* is a triangle.

Not drawn accurately

AB : *BC* = 1 : 3
The area of triangle *ABC* is 123 cm²
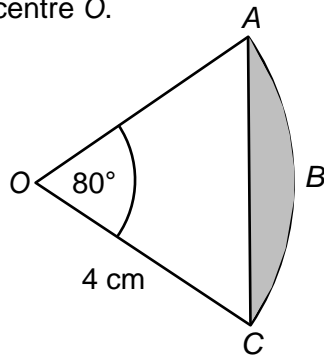Work out the length of *AB*.   **[3 marks]**

Answer _____ cm

$\boxed{\frac{}{12}}$

Turn over ▶

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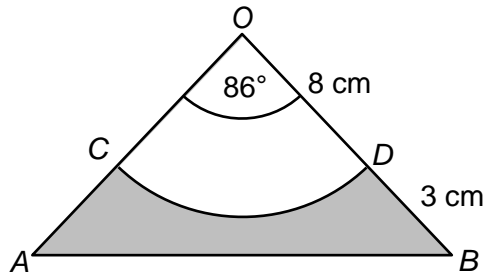
A

O 80°

4 cm

B

C

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*.

O

86°   8 cm

C

D

3 cm

A   B

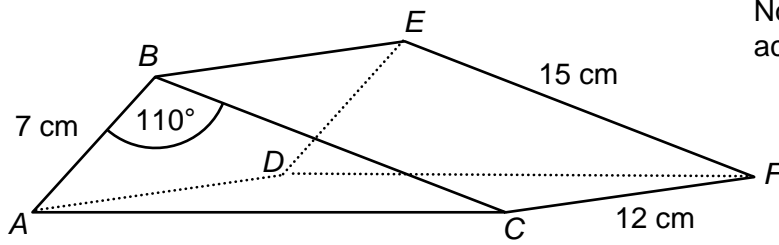Work out the area of the shaded region.   **[4 marks]**

Answer _____ cm^2

13 *ABCDEF* is a triangular prism.

E

B

15 cm

Not drawn
accurately

7 cm 110°

D

F

A C 12 cm

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]

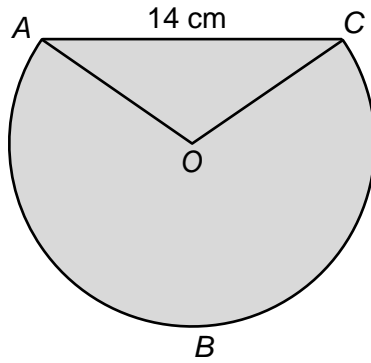Answer _____ g/cm^3

13

Turn over ▶

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

Not drawn
accurately

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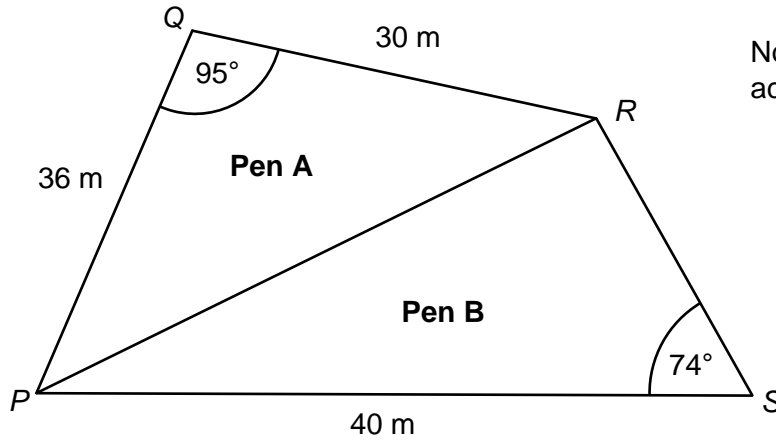Calculate the shaded area.

[6 marks]

Answer _____ cm^2

15 *PQRS* is a farmer's field that is split into two pens.

Q

30 m

95°

R

Not drawn
accurately

36 m

Pen A

Pen B

74°

P

40 m

S

Area of **Pen A** = Area of **Pen B**.
A fence is placed around the perimeter of the field and along the line *PR*.

Work out, to the nearest metre, the total length of all the fencing.

[6 marks]

Answer _____ m

12