



Name: _____ Date: _____ Score: _____ / 48

- 1** In triangle ABC, $AB = 6$ cm, $AC = 9$ cm and angle $BAC = 40^\circ$.
Work out the area of the triangle. Give your answer correct to 3 significant figures.

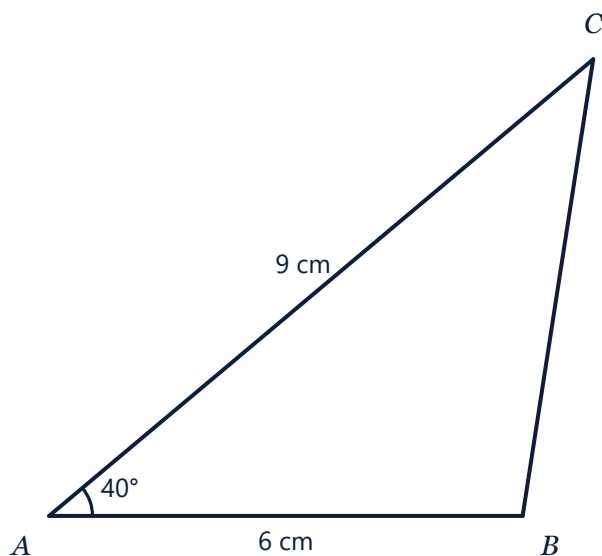


Diagram NOT accurately drawn

(2 marks)

Answer _____

2

In triangle PQR, $PQ = 8\text{ cm}$, $PR = 11\text{ cm}$ and angle $QPR = 52^\circ$.

Calculate the area of the triangle. Give your answer correct to 3 significant figures.

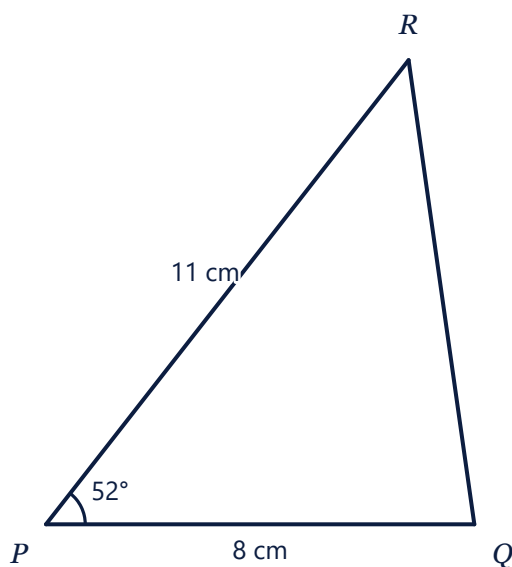


Diagram NOT accurately drawn

(2 marks)

Answer

3

ABCD is a parallelogram. $AB = 12\text{ cm}$, $AD = 7.5\text{ cm}$ and angle $DAB = 65^\circ$.

Calculate the area of the parallelogram. Give your answer correct to 3 significant figures.

(2 marks)

Answer

4

In triangle DEF, $DE = 9.4$ cm, $DF = 12.6$ cm and angle $EDF = 105^\circ$.

Calculate the area of the triangle. Give your answer correct to 3 significant figures.

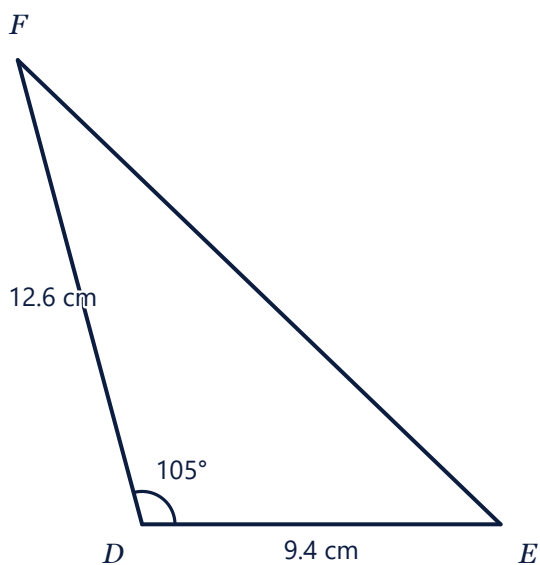


Diagram NOT accurately drawn

(2 marks)

Answer

5 In triangle ABC, $AB = 9\text{ cm}$ and $AC = 8\text{ cm}$.

The area of the triangle is 30 cm^2 .

Angle BAC is acute.

Work out the size of angle BAC. Give your answer correct to 1 decimal place.

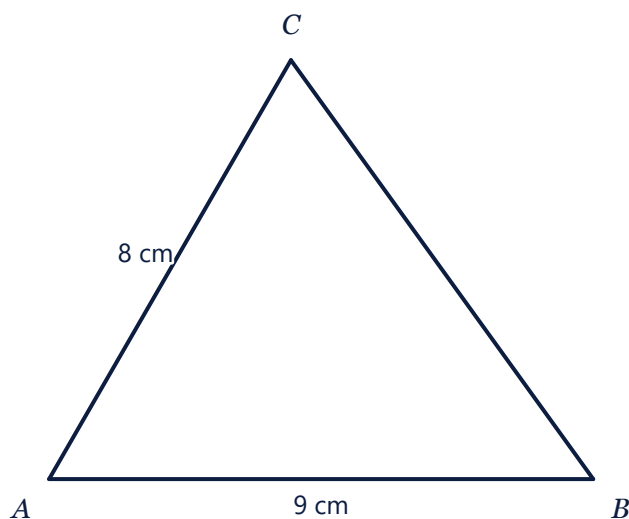


Diagram NOT accurately drawn

(3 marks)

Answer _____

6 In triangle PQR, $PQ = 10\text{ cm}$ and $PR = 12\text{ cm}$.

The area of the triangle is 45 cm^2 .

Angle QPR is obtuse.

Work out the size of angle QPR. Give your answer correct to 1 decimal place.

(3 marks)

Answer _____

7 In triangle XYZ, $XY = 10$ cm and angle $YXZ = 35^\circ$.

The area of the triangle is 42 cm^2 .

Work out the length of XZ. Give your answer correct to 3 significant figures.

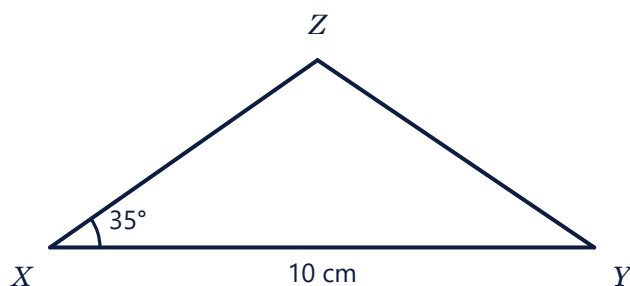


Diagram NOT accurately drawn

(3 marks)

Answer

8 In triangle ABC, $AB = 8\text{ cm}$, $BC = 12\text{ cm}$ and $AC = 15\text{ cm}$.

- Work out the size of angle ABC. Give your answer correct to 1 decimal place.
- Work out the area of the triangle. Give your answer correct to 3 significant figures.

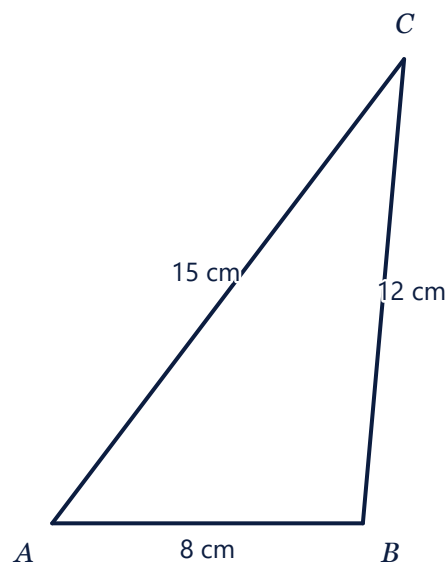


Diagram NOT accurately drawn

(5 marks)

Answer _____

9 A rectangle measures 9 cm by 4 cm .

A triangle has two sides of length 10 cm and 12 cm , with an acute angle of x° between them.

The area of the triangle is equal to the area of the rectangle.

Work out the value of x . Give your answer correct to 1 decimal place.

(4 marks)

Answer _____

10 A and B are points on a circle with centre O.

The circumference of the circle is 40 cm.

Angle $AOB = 68^\circ$.

Calculate the area of triangle AOB. Give your answer correct to 3 significant figures.

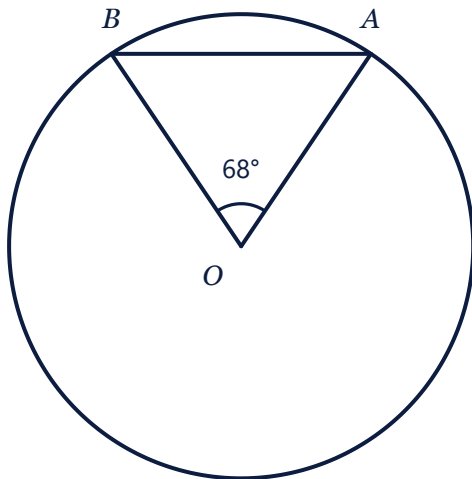


Diagram NOT accurately drawn

(4 marks)

Answer _____

11 A and B are points on a circle with centre O and radius 10 cm. Angle $AOB = 80^\circ$.

The chord AB cuts off a segment of the circle (the region between the chord AB and the minor arc AB).

Work out the area of this segment. Give your answer correct to 3 significant figures.

(4 marks)

Answer _____

- 12 ABCDE is a regular pentagon with sides of length 9 cm.

Work out the area of triangle ABC. Give your answer correct to 3 significant figures.

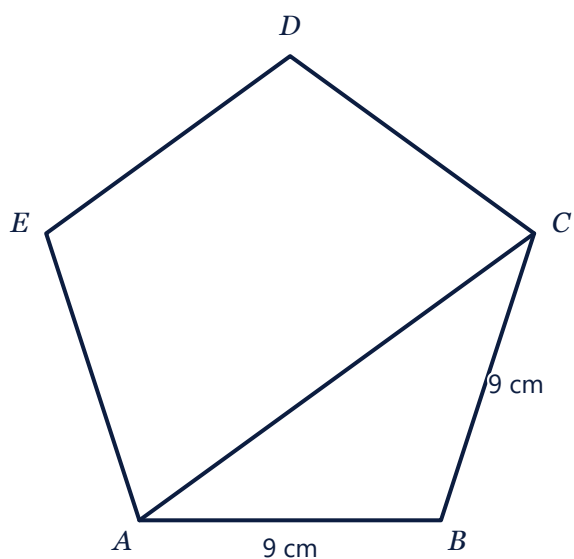


Diagram NOT accurately drawn

(4 marks)

Answer

- 13 In triangle ABC, $AB = 16$ cm, angle $BAC = 54^\circ$ and angle $ABC = 71^\circ$.

Work out the area of the triangle. Give your answer correct to 3 significant figures.

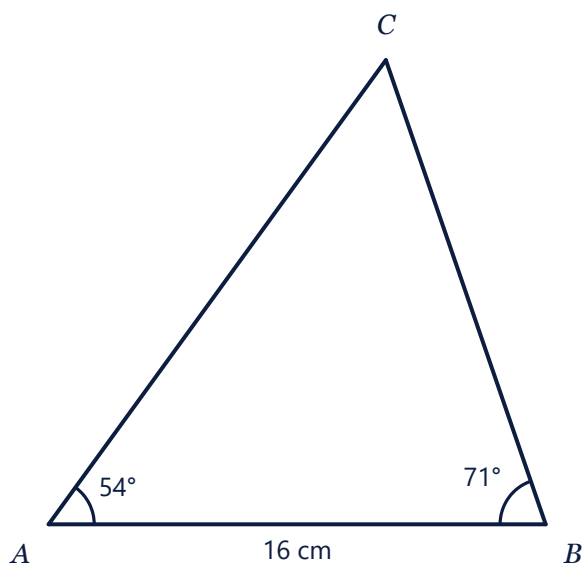


Diagram NOT accurately drawn

(5 marks)

Answer

14 ABCD is a quadrilateral. The diagonal BD splits it into two triangles.

In triangle ABD, $AB = 9\text{ cm}$, $BD = 13\text{ cm}$ and angle $ABD = 42^\circ$.

In triangle BCD, $BC = 11\text{ cm}$ and angle $DBC = 51^\circ$.

Work out the area of the quadrilateral ABCD. Give your answer correct to 3 significant figures.

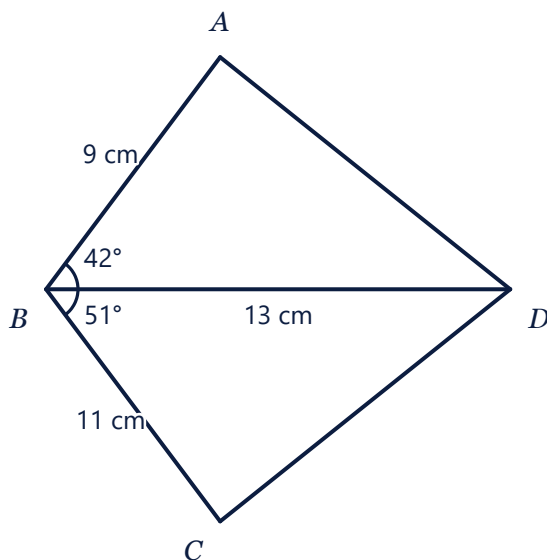


Diagram NOT accurately drawn

(5 marks)

Answer _____

End of questions | Total 48 marks