

Revision Exercise 3

1.

Here is triangle ABD .

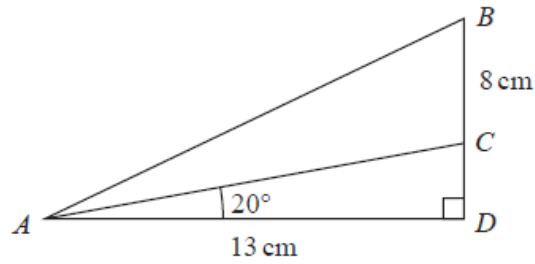


Diagram NOT accurately drawn

The point C lies on BD .

$AD = 13 \text{ cm}$ $BC = 8 \text{ cm}$ angle $ADB = 90^\circ$ angle $CAD = 20^\circ$

Calculate the size of angle BAC .

Give your answer correct to 1 decimal place.

.....

2.

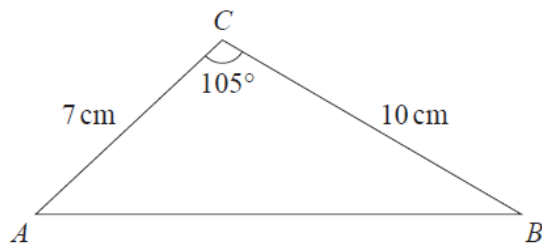


Diagram **NOT**
accurately drawn

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

..... cm^2
(2)

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

3.

Here is triangle ABC .

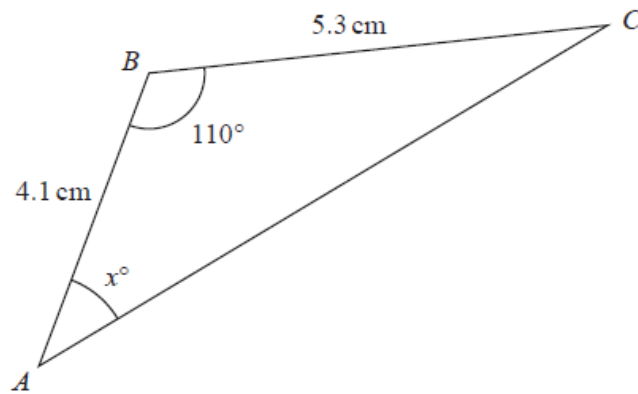


Diagram NOT
accurately drawn

Calculate the value of x .

Give your answer correct to 3 significant figures.

.....
(5)

4.

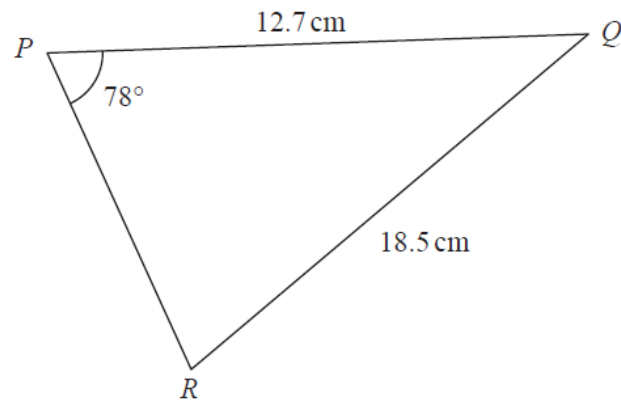


Diagram **NOT** accurately drawn

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

..... cm^2

5.

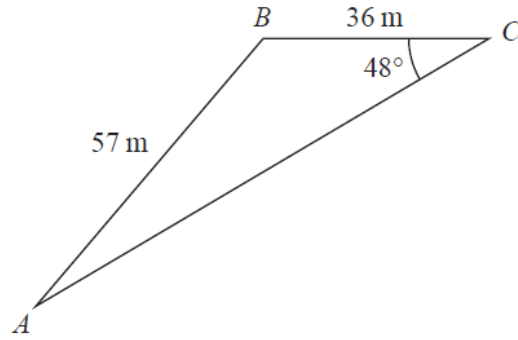


Diagram **NOT**
accurately drawn

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

..... m^2

6.

The diagram shows a triangular prism.

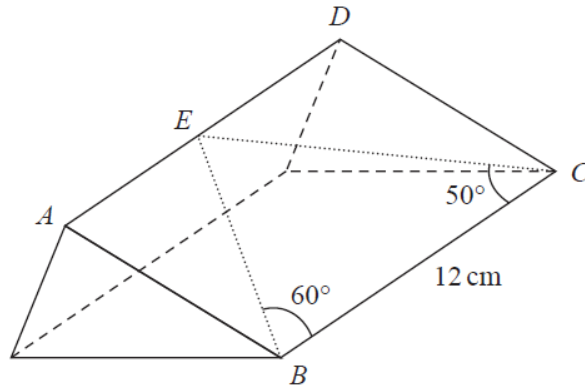


Diagram **NOT**
accurately drawn

The point E lies on AD .

Angle $EBC = 60^\circ$ Angle $ECB = 50^\circ$ Angle $ABC = 90^\circ$ Angle $BAD = 90^\circ$
 $BC = 12$ cm

Work out the length of AB .

Give your answer correct to 3 significant figures.

cm

7.

The diagram shows a sector $OABC$ of a circle, centre O and radius 15 cm.

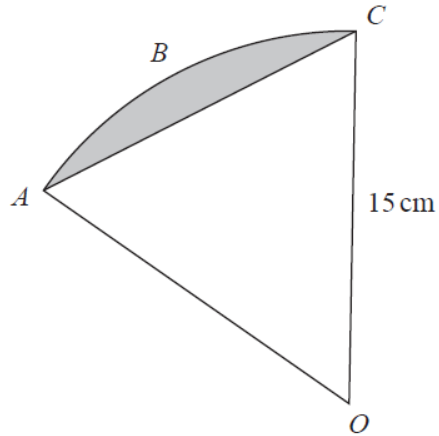


Diagram **NOT**
accurately drawn

The length of arc $ABC = 3\pi$ cm.

Work out the area of the shaded segment.
Give your answer correct to 1 decimal place.

cm²

8.

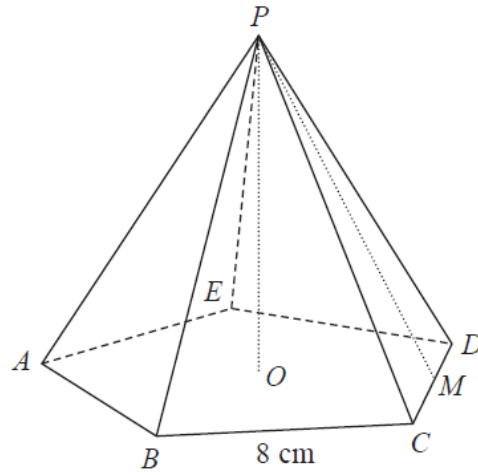


Diagram **NOT**
accurately drawn

The diagram shows a pyramid with horizontal base $ABCDE$.
 $ABCDE$ is a regular pentagon, centre O and side 8 cm .

The vertex P is vertically above O .
 M is the midpoint of CD .
 $OP = 10\text{ cm}$.

Calculate the size of angle APM .
Give your answer correct to 1 decimal place.

9.

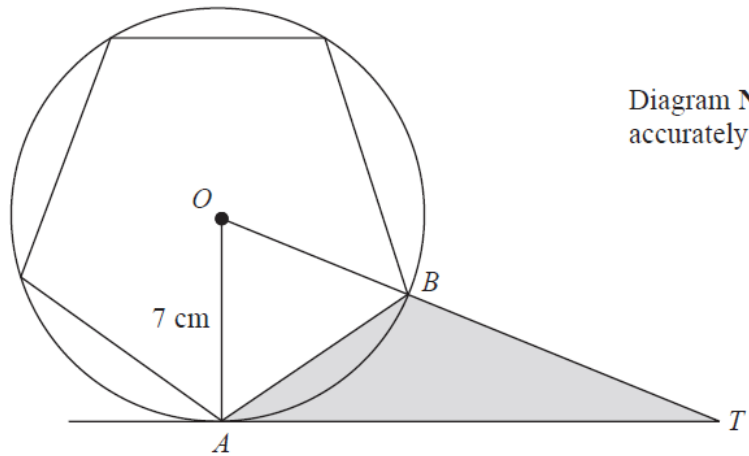


Diagram **NOT**
accurately drawn

The diagram shows a regular pentagon inside a circle, centre O .
The points A and B lie on the circle such that AB is a side of the pentagon.
 $OA = 7$ cm.
 TA is a tangent to the circle and OBT is a straight line.

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

..... cm²

10.

$ABCDE$ is a regular pentagon with sides of length 10 cm.

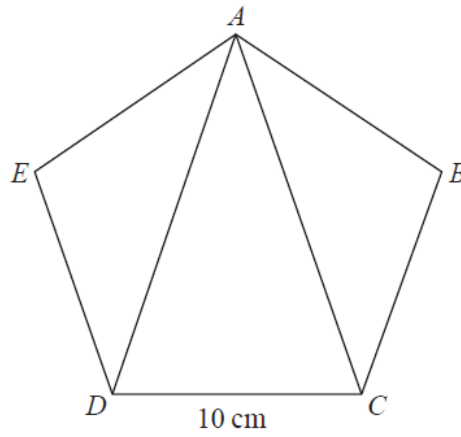


Diagram **NOT**
accurately drawn

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

.....cm²
