

Past Paper Questions – Sine Rule and Cosine Rule

18.

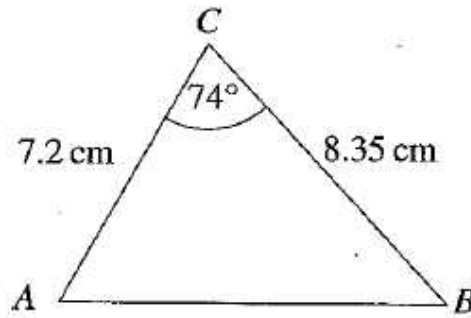


Diagram NOT
accurately drawn

The diagram shows triangle ABC .

$AC = 7.2$ cm.

$BC = 8.35$ cm.

Angle $ACB = 74^\circ$.

- (a) Calculate the area of triangle ABC .
Give your answer correct to 3 significant figures.
Give the units with your answer.

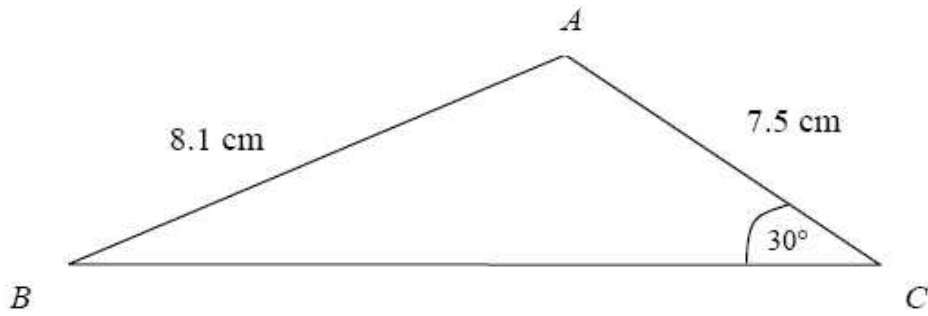
.....

(3)

- (b) Calculate the length of AB .
Give your answer correct to 3 significant figures.

14.

Diagram **NOT**
accurately drawn



In triangle ABC ,

$AB = 8.1$ cm,
 $AC = 7.5$ cm,
angle $ACB = 30^\circ$.

- (a) Calculate the size of angle ABC .
Give your answer correct to 3 significant figures.

.....°
(3)

- (b) Calculate the area of triangle ABC .
Give your answer correct to 3 significant figures.

.....cm²
(3)

16.

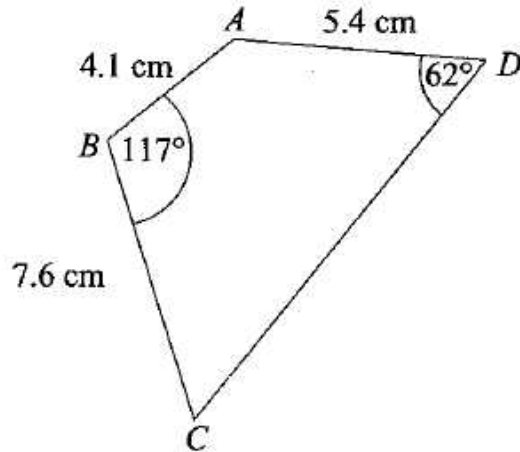


Diagram **NOT** accurately drawn.

The diagram shows a quadrilateral $ABCD$.

$AB = 4.1$ cm.

$BC = 7.6$ cm.

$AD = 5.4$ cm.

Angle $ABC = 117^\circ$.

Angle $ADC = 62^\circ$.

(a) Calculate the length of AC .

Give your answer correct to 3 significant figures.

(b) Calculate the area of triangle ABC .

Give your answer correct to 3 significant figures.

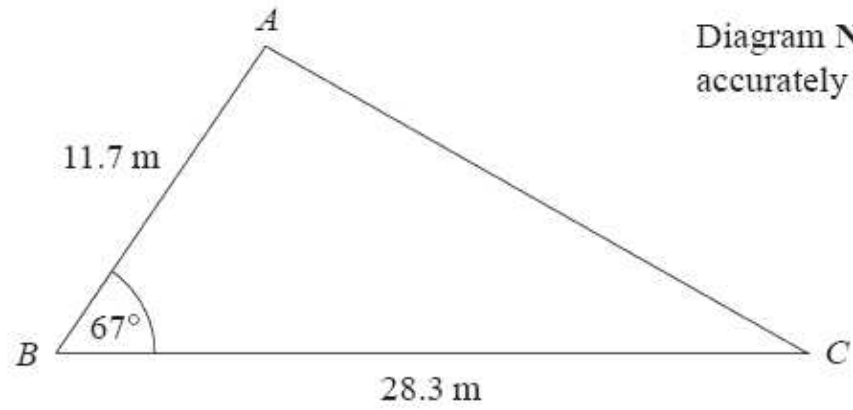
..... cm^2
(2 marks)

(c) Calculate the area of the quadrilateral $ABCD$.

Give your answer correct to 3 significant figures.

(6 marks)

12.



$AB = 11.7$ m.
 $BC = 28.3$ m.
Angle $ABC = 67^\circ$.

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

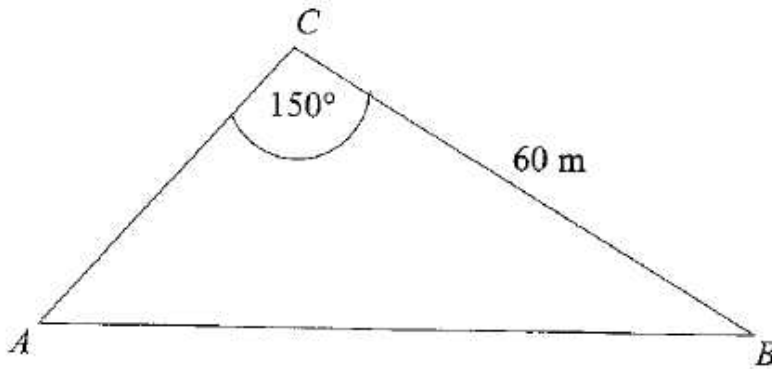
..... m^2
(2)

- (b) Calculate the length of AC .
Give your answer correct to 3 significant figures.

..... m
(3)

20.

Diagram **NOT**
accurately drawn



Angle $ACB = 150^\circ$.
 $BC = 60\text{ m}$.

The area of triangle ABC is 450 m^2 .

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

..... m

(Total 5 marks)