

Area of a Triangle (Trigonometry)



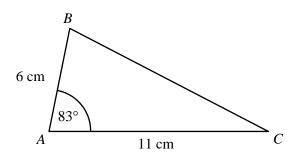


REVISE THIS TOPIC

CHECK YOUR **ANSWERS**



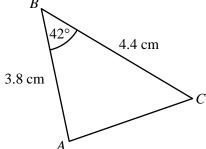
Here is triangle ABC.



Work out the area of the triangle. Give your answer to 1 decimal place.

(Total for Question 1 is 2 marks)

Here is triangle ABC.

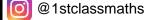


Work out the area of the triangle. Give your answer to 1 decimal place.

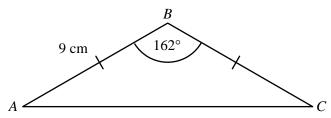
(Total for Question 2 is 2 marks)









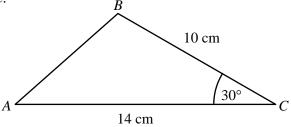


Work out the area of the triangle. Give your answer to 1 decimal place.

 \ldots cm^2

(Total for Question 3 is 2 marks)

Here is triangle ABC.



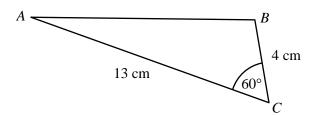


Work out the area of the triangle. Give your answer to 1 decimal place.

(Total for Question 4 is 3 marks)







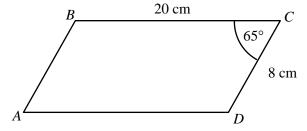
Work out the area of the triangle.

Give your answer in the form $k\sqrt{3}$, where k is an integer.



(Total for Question 5 is 3 marks)

ABCD is a parallelogram.



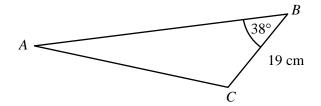
Work out the area of the parallelogram. Give your answer to 1 decimal place.



(Total for Question 6 is 3 marks)





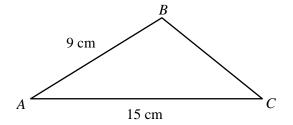


The area of the triangle is 350 cm^2 Work out the length of AB. Give your answer to 1 decimal place.

.....cm

(Total for Question 7 is 3 marks)

8 Here is triangle *ABC*.



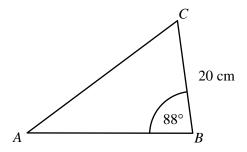
The area of the triangle is 23 cm² Work out the size of the acute angle, *BAC*. Give your answer to 1 decimal place.

1st

(Total for Question 8 is 3 marks)







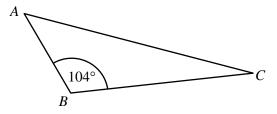
AB:BC=8:5

Work out the area of the triangle. Give your answer to 1 decimal place.

.....cm²

(Total for Question 9 is 3 marks)

10 Here is triangle *ABC*.



AB : BC = 1 : 3

The area of triangle ABC is 123 cm²

Work out the length of AB.

Give your answer to 1 decimal place.

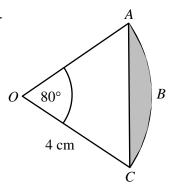


(Total for Question 10 is 3 marks)





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

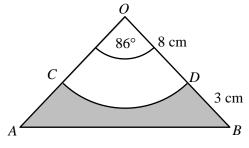


Calculate the area of the shaded region. Give your answer to 1 decimal place.

.....cm²

(Total for Question 11 is 4 marks)

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

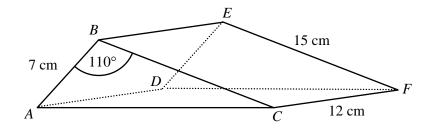


Work out the area of the shaded region.

1st

Solutions

13 *ABCDEF* is a triangular prism.

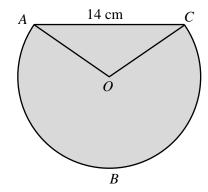


The prism has a mass of 0.5 kg. Calculate the density of the prism in g/cm³ Give your answer to 3 significant figures.

(Total for Question 13 is 5 marks)



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



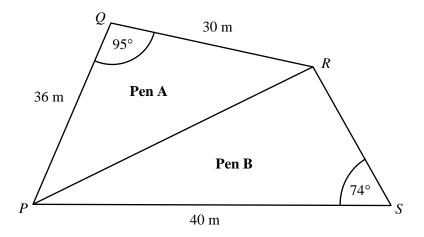
The perimeter of triangle *AOC* is 30 cm. Calculate the shaded area. Give your answer to 1 decimal place.

(Total for Question 14 is 6 marks)





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



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.

(Total for Question 15 is 6 marks)



