



The Cosine Rule



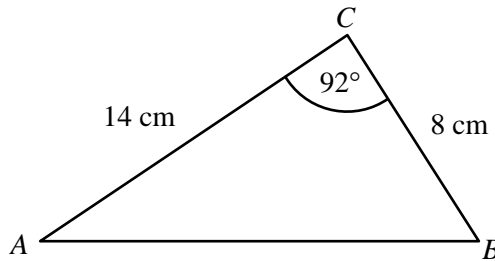
SCAN ME

REVISE THIS TOPIC

CHECK YOUR ANSWERS

SCAN ME

1 Here is triangle ABC .

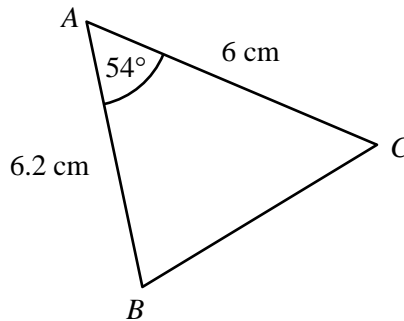


Work out the length of AB .
Give your answer to 1 decimal place.

.....cm

(Total for Question 1 is 3 marks)

2 Here is triangle ABC .



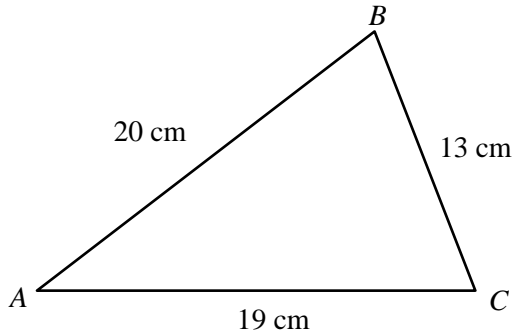
Work out the length of BC .
Give your answer to 1 decimal place.

.....cm

(Total for Question 2 is 3 marks)



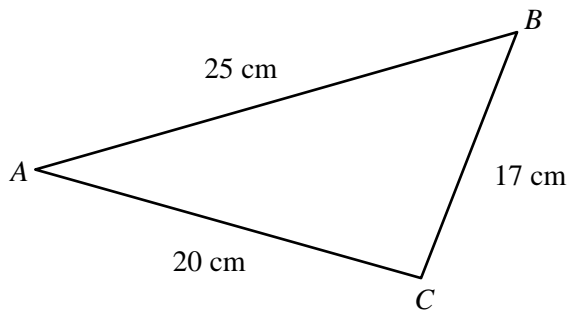
3 Here is triangle ABC .



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

(Total for Question 3 is 3 marks)

4 Here is triangle ABC .

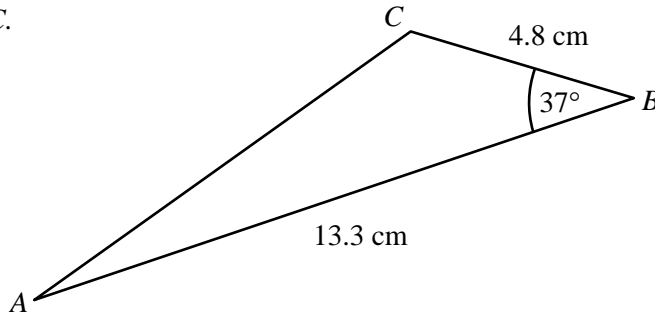


Work out the size of angle ABC .
 Give your answer to 1 decimal place.

(Total for Question 4 is 3 marks)



5 Here is triangle ABC .

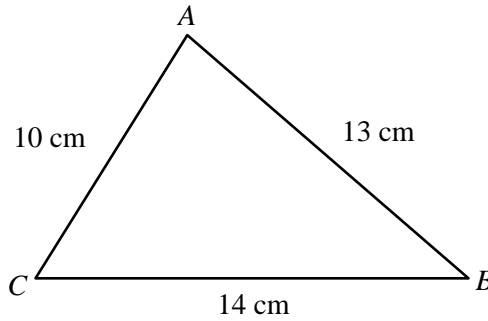


Work out the length of AC .
 Give your answer to 1 decimal place.

..... cm

(Total for Question 5 is 3 marks)

6 Here is triangle ABC .



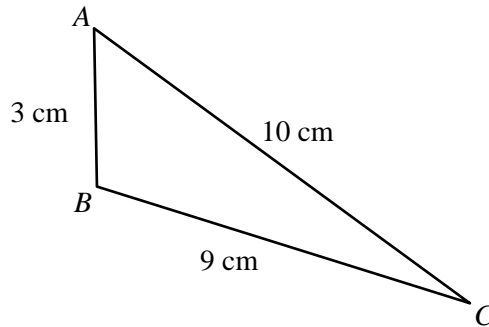
Work out the size of angle BCA .
 Give your answer to 1 decimal place.

.....

(Total for Question 6 is 3 marks)



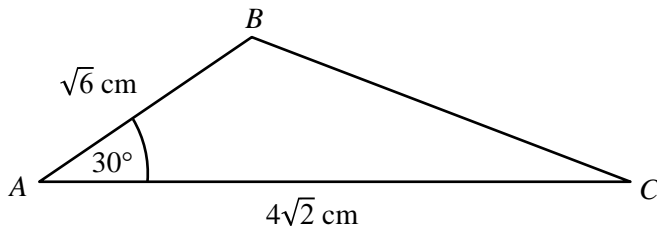
7 Here is triangle ABC .



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

.....
 (Total for Question 7 is 3 marks)

8 Here is triangle ABC .

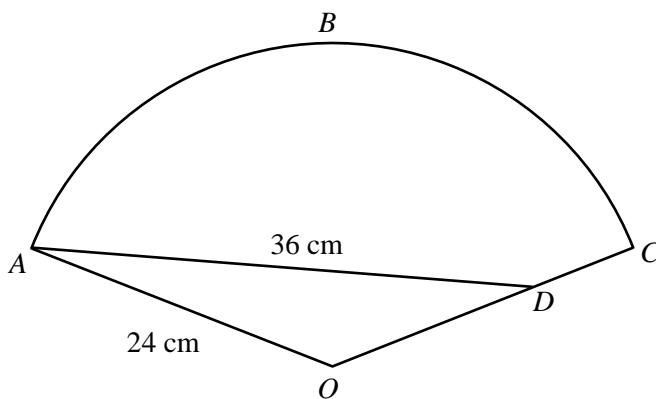


Work out the length of BC .
 Give your answer in the form \sqrt{k} , where k is an integer.

.....cm
 (Total for Question 8 is 4 marks)



9 $ABCO$ is a sector with centre O .



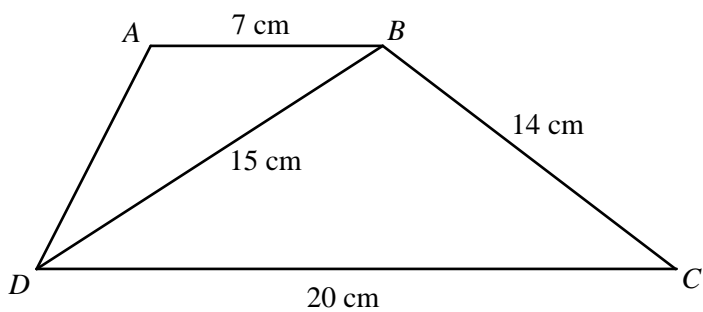
D is the point on OC so that $OD : DC = 5 : 3$
 $AO = 24$ cm
 $AD = 36$ cm

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

..... cm²
 (Total for Question 9 is 5 marks)



10 $ABCD$ is a trapezium with AB parallel to CD .



Work out the length of line AD .
Give your answer to 1 decimal place.

.....cm
(Total for Question 10 is 5 marks)



11 Boat *A* and Boat *B* both leave the Port P at 12pm.

Boat *A* travels on a bearing of 112° and travels at a constant speed of 16 mph.
Boat *B* travels on a bearing of 220° and travels at a constant speed of 14 mph.

At 2:30 pm, what is the direct distance between the two boats.

..... miles

(Total for Question 11 is 5 marks)

