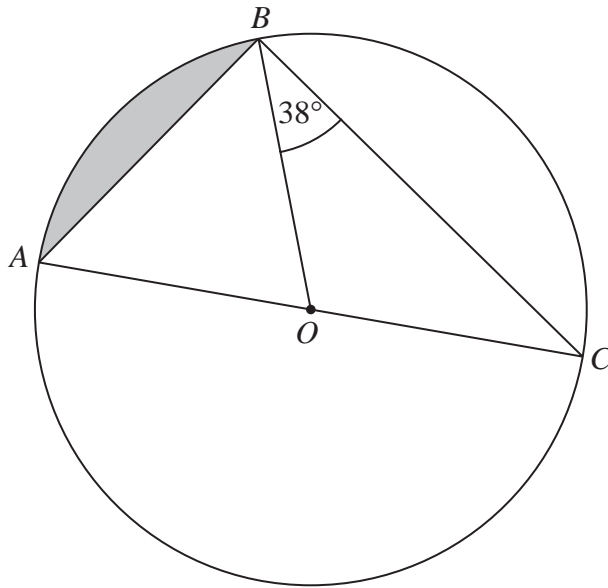


18  $A$ ,  $B$  and  $C$  are points on a circle with centre  $O$  and radius 12 cm.



$AOC$  is a diameter of the circle.

Angle  $OBC = 38^\circ$

Calculate the area of the shaded segment.

Give your answer correct to 2 decimal places.

..... cm<sup>2</sup>

(Total for Question 18 is 5 marks)