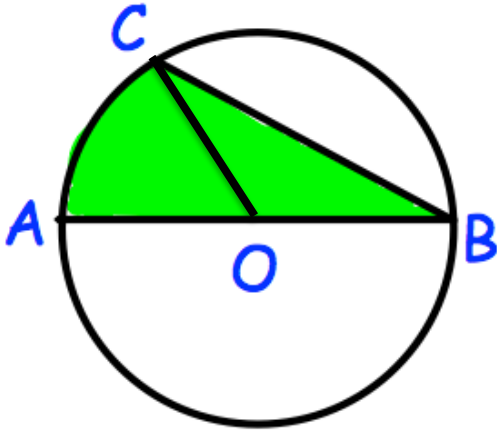


August 28th

The circle with centre O has a diameter AB of length 16cm and angle ABC = 30°.



Divide the area into a triangle OBC and sector OAC

Radius OB = 8cm

Since angle ABC = 30°,

BOC = 120° and AOC = 60°

Area of triangle OBC =  $\frac{1}{2} \times 8 \times 8 \times \sin 120 = 16\sqrt{3}$

Area of sector OAC =  $\frac{1}{6} \times \pi \times 8^2 = \frac{32}{3}\pi$

Total shaded area =  $16\sqrt{3} + \frac{32}{3}\pi \approx 61.2 \text{ cm}^2$