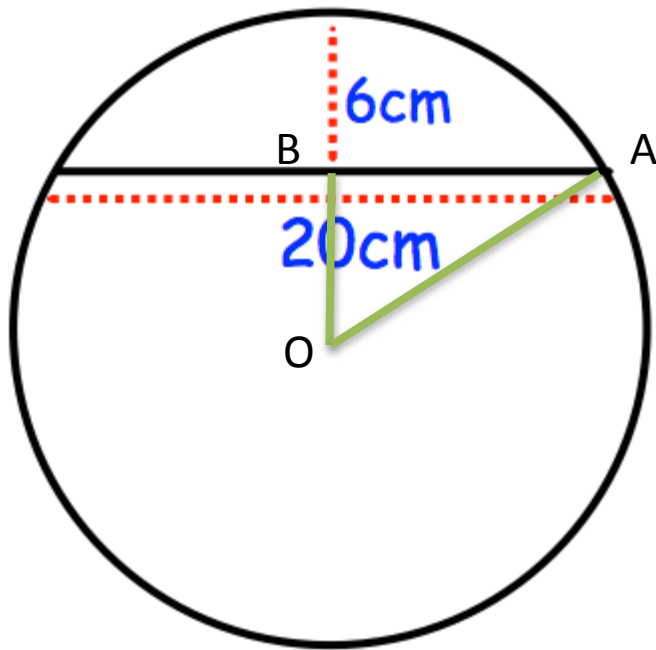


January 25th



$$OA = r$$

$$OB = r - 6$$

$$AB = 10\text{cm}$$

Since OBA is a right angle, using Pythagoras gives

$$r^2 = (r - 6)^2 + 10^2$$

$$\text{Hence } r^2 = r^2 - 12r + 36 + 100$$

$$\text{Therefore } 12r = 136$$

$$\text{Giving } r = \frac{136}{12} = \frac{34}{3} \text{ or } 11\frac{1}{3}$$