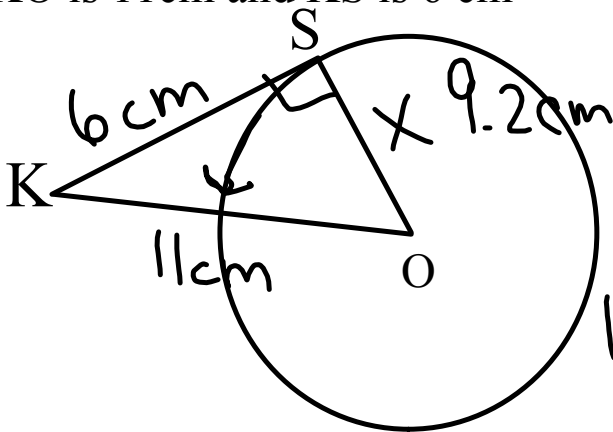


Section 8.1 Warm Up




SK is a tangent determine the length of SO if given the following:
KO is 11cm and KS is 6 cm

SHOW ALL WORK AND COPY THIS DOWN



$$c^2 - b^2 = a^2$$

$$11^2 - 6^2 = a^2$$

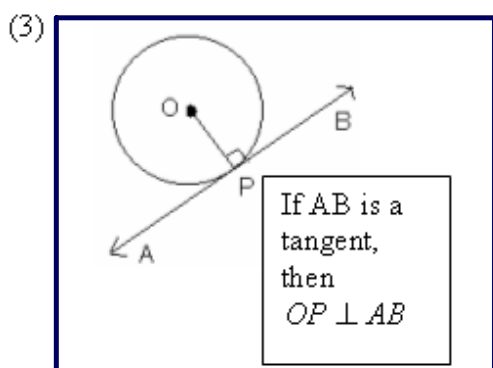
$$121 - 36 = a^2$$

$$\sqrt{85} = \sqrt{a^2}$$

$$9.2 = a$$

Tangent Property:

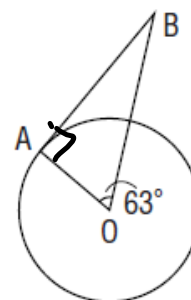
A tangent to a circle is perpendicular to the radius at the point of tangency. $\angle APO = \angle BPO = 90^\circ$



Solving Problems Using the Tangent and Radius Property



Point O is the centre of a circle
and AB is a tangent to the circle.
In $\triangle OAB$, $\angle AOB = 63^\circ$
Determine the measure of $\angle OBA$.



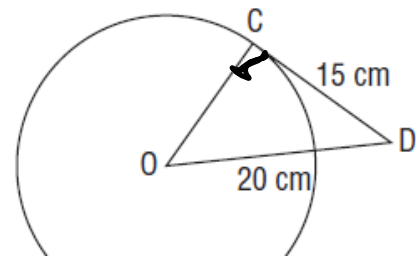
► **A Solution**

$$180 - 63 - 90$$
$$\angle OBA = 27^\circ$$

Solving Problems Using the Tangent and Radius Property

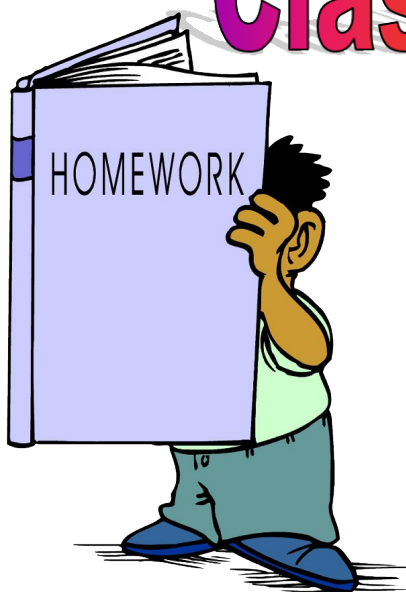


Point O is the centre of a circle and CD is a tangent to the circle.
 $CD = 15$ cm and $OD = 20$ cm
 Determine the length of the radius OC.
 Give the answer to the nearest tenth.



$$\begin{aligned}
 c^2 - b^2 &= a^2 \\
 20^2 - 15^2 &= a^2 \\
 400 - 225 &= a^2 \\
 \sqrt{175} &= \sqrt{a^2} \\
 13.2 &= a
 \end{aligned}$$

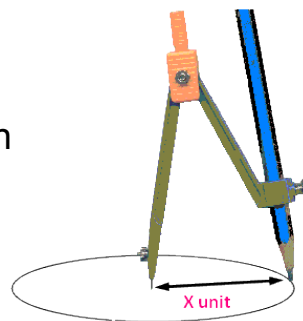
Class/Homework



Page 388-390

Please provide sketches for each

- | | |
|-------------|----------|
| 3 ab | 8 |
| 4a | 9 |
| 5abc sketch | 13 |
| 6abc sketch | 14 |
| 7ab sketch | 16 c |
| | 17 |
| | 20 (try) |



Section 8.1 Sticky Note Activity.docx