

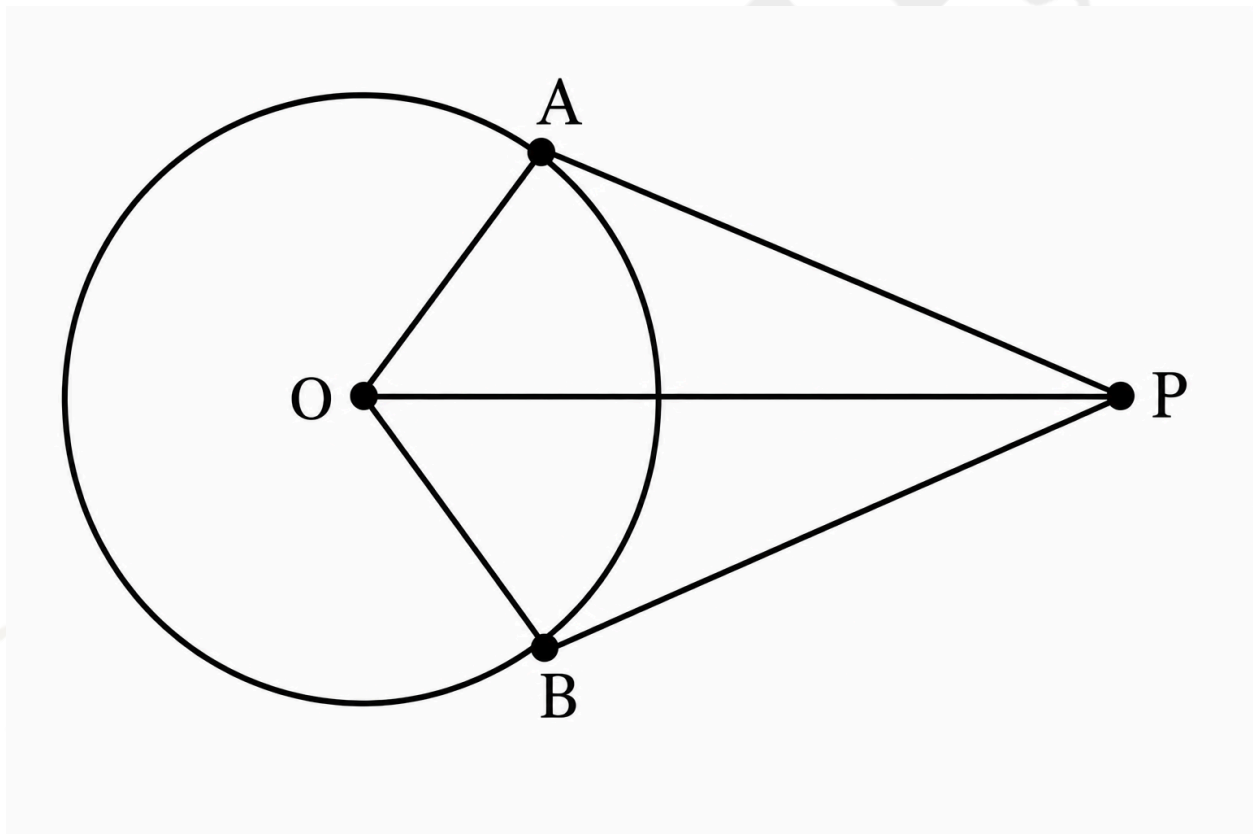
Class 10 Mathematics - Circles

Name: _____

Date: _____

Advanced Worksheet 1

Diagram for Questions 1 - 4



Questions

1. If $PA = 15$ cm, find PB .
2. If $PA = 3x + 2$ and $PB = 5x - 6$, find x .

3. If $PA = 4y - 1$ and $PB = 2y + 9$, find y .
4. If $PA = 18$ cm and $OP = 30$ cm, find the radius of the circle.
5. State the theorem relating the lengths of tangents drawn from an external point.
6. Why are $\triangle OAP$ and $\triangle OBP$ congruent?

Answer Key

1. 15 cm
2. $x = 4$
3. $y = 5$
4. Radius = 24 cm
5. The lengths of tangents drawn from an external point to a circle are equal.
6. By RHS Congruence ($OA = OB$, OP common, $\angle OAP = \angle OBP = 90^\circ$).