

CIRCLES

Sujith 02

December 2023

1. In Figure 1, from an external point P , two tangents PQ and PR are drawn to a circle of radius 4cm with centre O . If $\angle QPR = 90^\circ$, then length of PQ is
- (A) 3cm
 - (B) 4cm
 - (C) 2cm
 - (D) $2\sqrt{2}\text{cm}$

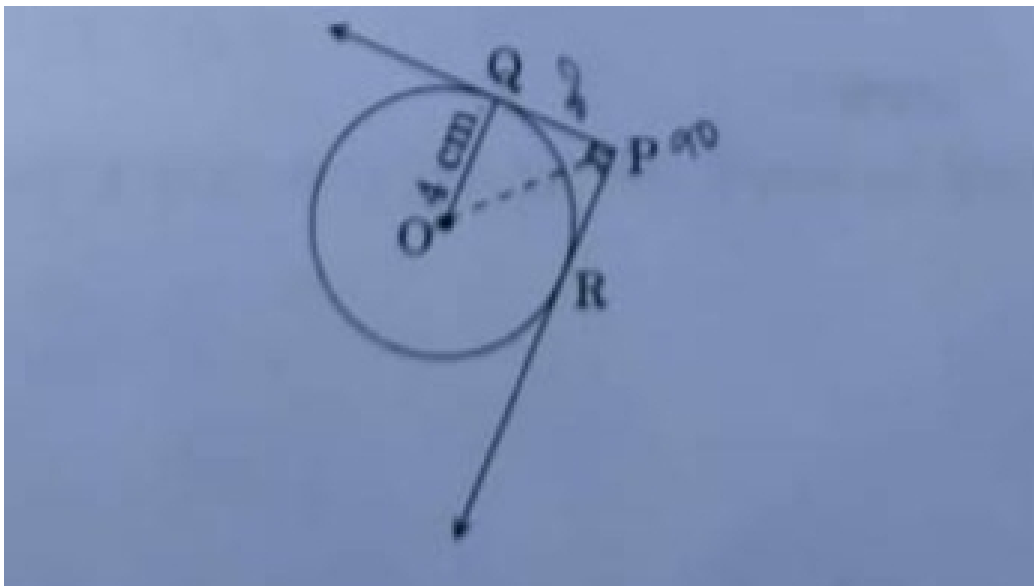


Figure 1

2. In Figure 2, PQ is tangent to the circle with centre at O , at the point B . If $\angle AOB = 100^\circ$, then $\angle ABP$ is equal to
- (A) 50°
(B) 40°
(C) 60°
(D) 80°

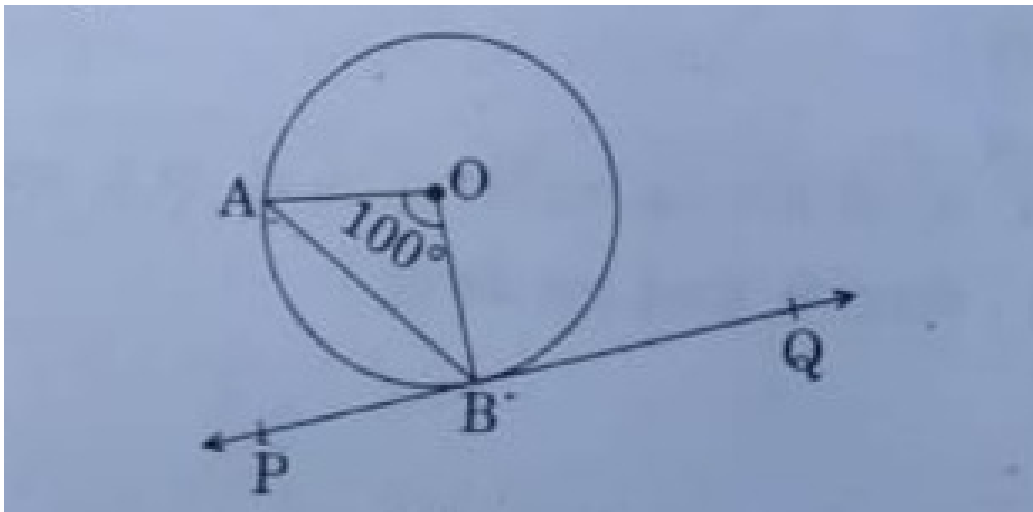


Figure 2

3. In Figure ??, a quardilateral $ABCD$ is drawn to circumscribe a circle.
Prove that
 $AB + CD = BC + AD$.

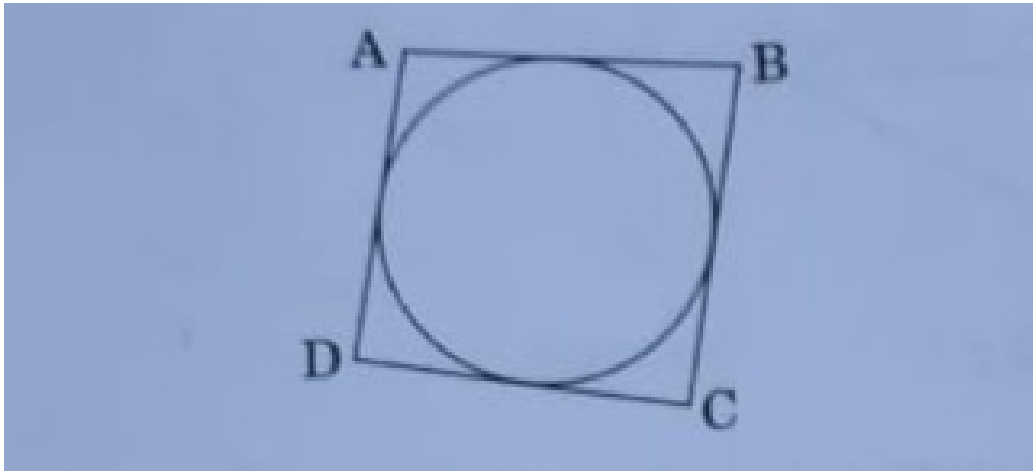


Figure 3

4. In Figure 4, find the perimeter of $\triangle ABC$, if $AP = 12\text{cm}$.

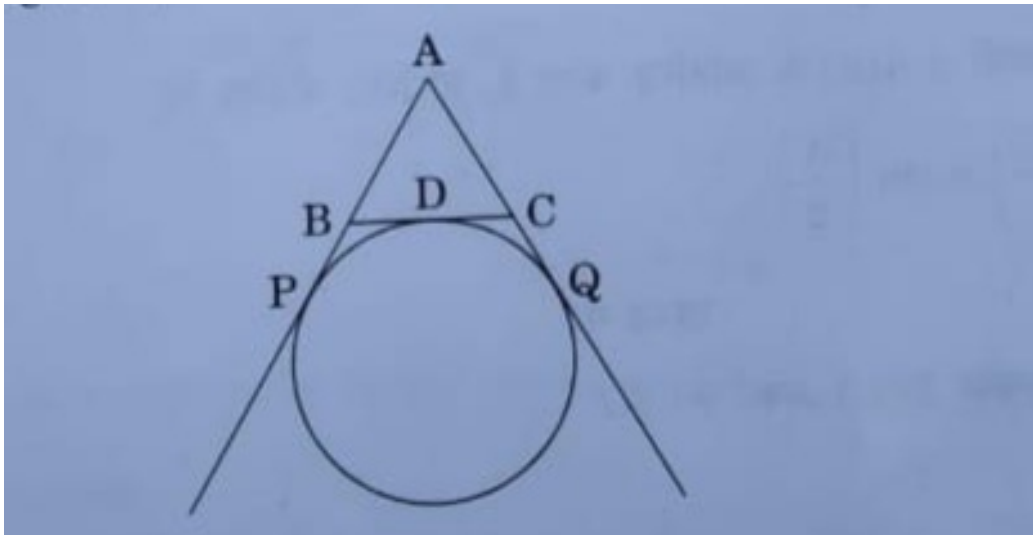


Figure 4