

CIRCLES

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1. In Figure-1, from an external point P , two tangent PQ and PR are drawn to a circle of radius 4cm with center O . If $\angle PQR = 90^\circ$, then length of PQ is
 - (a) 3cm
 - (b) 4cm
 - (c) 2cm
 - (d) $2\sqrt{2}\text{cm}$

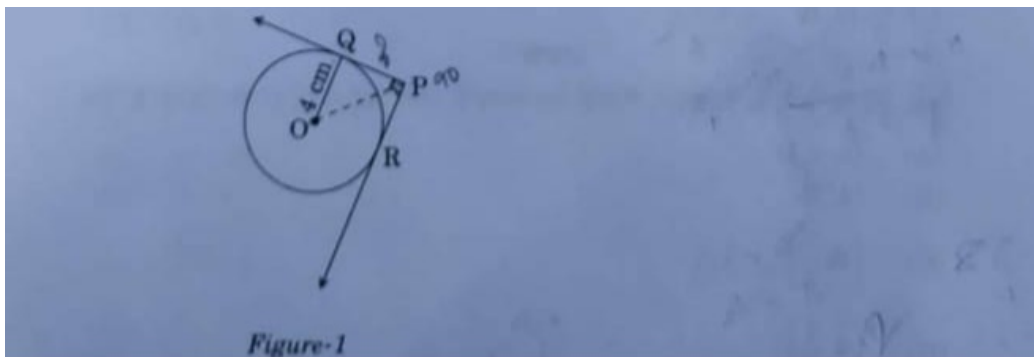


Figure 1

2. In Figure-2, PQ is tangent to the circle with center 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°

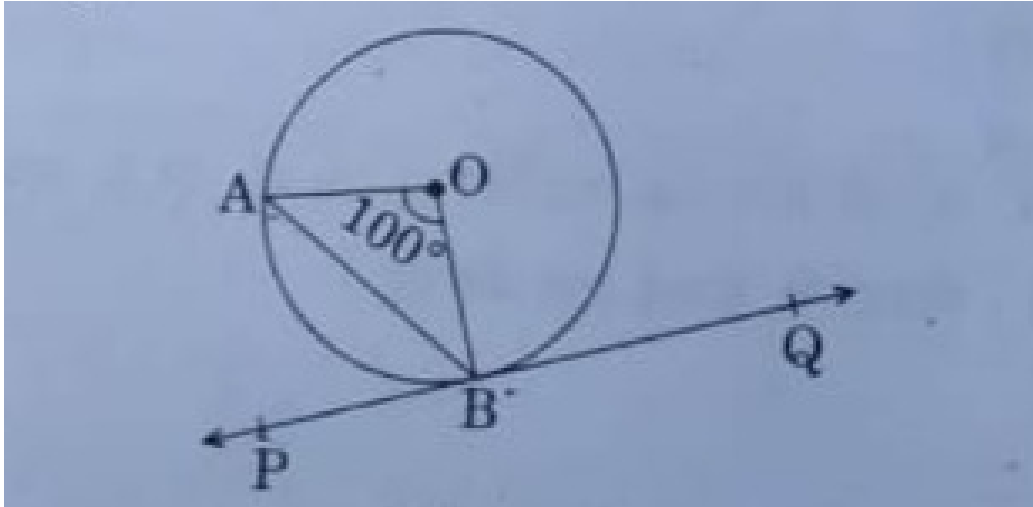


Figure 2

3. In Figure-3, quadrilateral $ABCD$ is drawn to circumscribe a circle. prove that
 $AB+CD=BC+AD$

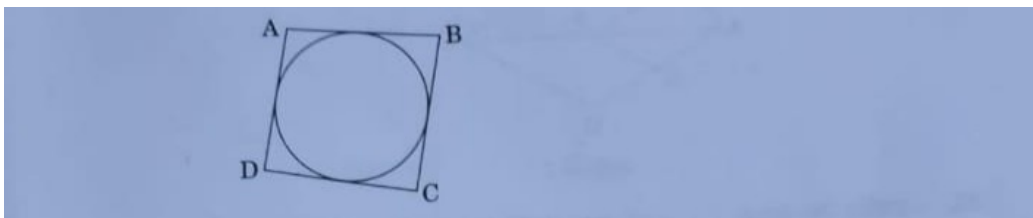


Figure 3

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

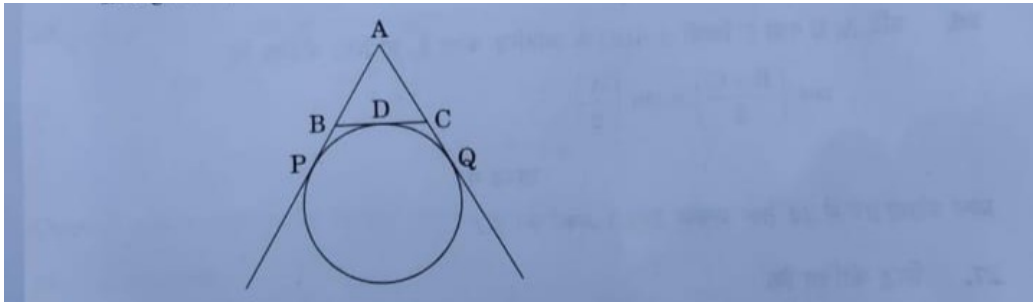


Figure 4