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 Q. If $\angle PQR = 90^{\circ}$, then length of PQ is
 - (a) 3*cm*
 - (b) 4*cm*
 - (c) 2*cm*
 - (d) $2\sqrt{2}cm$

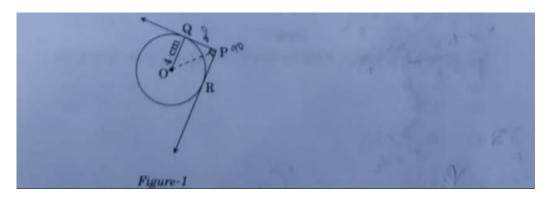


Figure 1

- 2. In Figure-2, PQ is tangent to the circe 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°

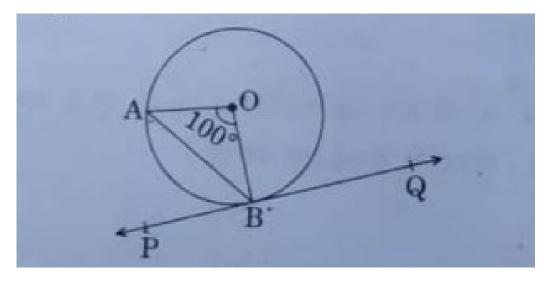


Figure 2

3. In Figure-3, quadrilateral ABCD is drawn to circumscribe a circle. prove that

$$AB + CD = BC + AD$$

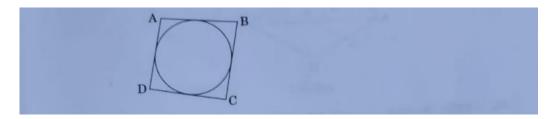


Figure 3

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

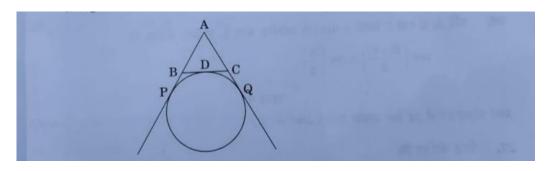


Figure 4