

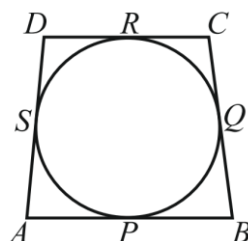
1. If two tangents inclined at an angle 60° are drawn to a circle of radius 3 cm, then the length of each tangent is equal to:

(A) $\frac{3}{2}\sqrt{3}$ cm (B) 6 cm
(C) 3 cm (D) $3\sqrt{3}$ cm

2. From a point P which is a distance of 13 cm from the centre O of a circle of radius 5 cm, the pair of tangents PQ and PR to the circle are drawn. Then the area of the quadrilateral PQOR is:

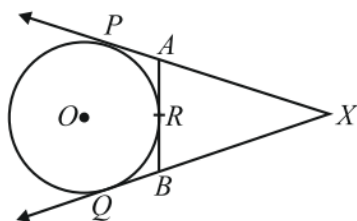
(A) 60 cm^2
(B) 65 cm^2
(C) 30 cm^2
(D) 32.5 cm^2

3. If figure, a quadrilateral ABCD is drawn to circumscribe a circle such that its sides AB, BC, CD and AD touch the circle at P, Q, R and S respectively. If $AB = x$ cm, $BC = 7$ cm, $CR = 3$ cm and $AS = 5$ cm, find x :



(A) 10 (B) 9
(C) 8 (D) 7

4. In figure, XP and XQ are tangents from X to the circle with centre O. R is a point on the circle. Prove that, $XA + AR = XB + BR$.



5. Draw a circle and two lines parallel to a given line such that one is tangent and other a secant to the circle.

6. Match the following:

List-I		List-II	
(P)	Tangents drawn at endpoints of the diameter are	(1)	Four
(Q)	If two circles are non-intersecting then the number of common tangent are	(2)	Parallel
(R)	Maximum number of tangents that can be drawn from an exterior point to circles is	(3)	Perpendicular
(S)	Tangent drawn at the point on a circle to the radius through the point of contact are	(4)	Two

(A) P-2, Q-1, R-4, S-3
(B) P-2, Q-3, R-1, S-4
(C) P-1, Q-2, R-3, S-4
(D) P-1, Q-3, R-2, S-4

7. A tangent PQ at a point P of a circle of radius 5 cm meets a line through the centre O at a point Q so that $OQ = 13$ cm. Find the length of PQ.
8. A line through the centre O of a circle of radius 7 cm cuts the tangent, at a point P on the circle at Q such that $PQ = 24$ cm. Find OQ.
9. A point P is 13 cm from the centre of the circle. The length of the tangent drawn from P to the circle is 12 cm. Find the radius of the circle



Note: Kindly find the Video Solution of DHAs Questions in the DPPs Section.

Answer Key

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|----|-----------|----|---------|
| 1. | (D) | 6. | (A) |
| 2. | (A) | 7. | (12 cm) |
| 3. | (B) | 8. | (25 cm) |
| 4. | (Proof) | 9. | (5 cm) |
| 5. | (Diagram) | | |



PW Web/App - <https://smart.link/7wwosivoicgd4>
Library- <https://smart.link/sdfez8ejd80if>