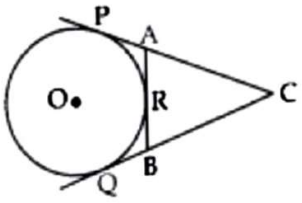
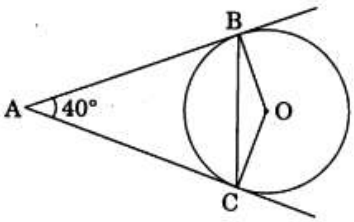
1. In given figure, CP and CQ are tangents to a circle with centre O. ARB is another tangent touching the circle at R. If $CP = 11cm$ and $BC = 6cm$ then the length of B R is



(a) $6cm$ (b) $5cm$

(c) $4cm$ (d) $3cm$

2. In the given figure, A B and A C are tangents to the circle with centre O such that $\angle BAC = 40^\circ$, then $\angle BOC$ is equal to



(a) 40° (b) 50°

(c) 140° (d) 150°

3. If TP and TQ are the two tangents to a circle with centre O so that $\angle POQ = 110^\circ$, then $\angle PTQ$ is equal to

(a) 60° (b) 70° (c) 80° (d) 90°

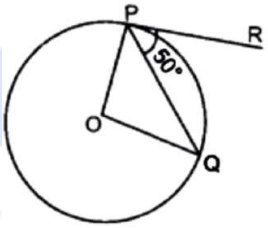
4. A tangent intersects the circle at:

(a) One point (b) Two distinct point (c) At the circle (d) None of the above

5. A circle can have parallel tangents at a single time.

(a) One (b) Two (c) Three (d) Four

6. In figure if O is centre of a circle, PQ is a chord and the tangent PR at P makes an angle of 50° with PQ, then $\angle POQ$ is equal to



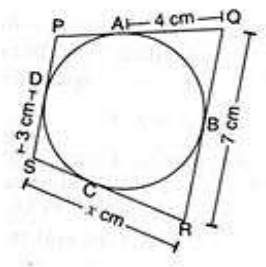
(a) 100° (b) 80°

(c) 90° (d) 75°

7. If angle between two radii of a circle is 130°, the angle between the tangents at the ends of radii is

(a) 90° (b) 50° (c) 70° (d) 40°

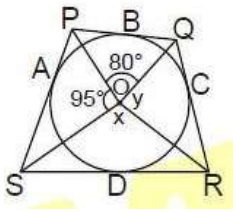
8. In Figure, if $AQ = 4cm, QR = 7cm, DS = 3cm$, then $x =$



(a) $6cm$ (b) $8cm$

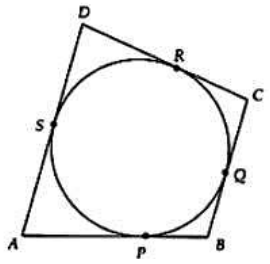
(c) $11cm$ (d) $10cm$

11. In Figure, if quadrilateral PQRS circumscribes a circle, then



(a) $x = 95^\circ, y = 95^\circ$ (b) $x = 100^\circ, y = 90^\circ$ (c) $x = 100^\circ, y = 85^\circ$ (d) $x = 85^\circ, y = 90^\circ$

12. In 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 $AS = 5\,cm$, then $x =$



(a) 10 (b) 9
(c) 8 (d) 7

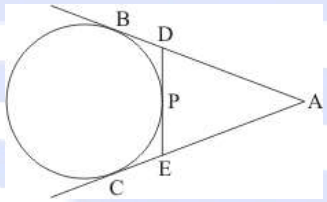
13. The length of the tangent AP, from an external point A is $24\,cm$. If the distance of the point A from the centre O of the circle is $25\,cm$, then the diameter of the circle is

(a) $15\,cm$ (b) $14\,cm$ (c) $7\,cm$ (d) $12\,cm$

14. The length of the tangent AP, from an external point A is $24\,cm$. If the distance of the point A from the centre O of the circle is $25\,cm$, then the diameter of the circle is

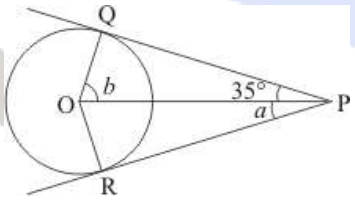
(a) $15\,cm$ (b) $14\,cm$ (c) $7\,cm$ (d) $12\,cm$

15. In Fig, if $AB = 8\,cm$ and $PE = 3\,cm$, then $AE =$



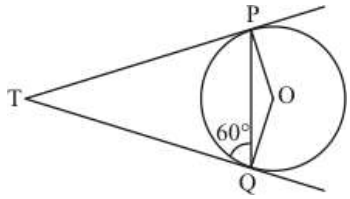
(a) $11\,cm$ (d) $3\,cm$ (c) $5\,cm$ (b) $7\,cm$

16. In Fig, PQ and PR are tangents drawn from P to a circle with centre O. If $\angle OPQ = 35°$, the



(a) $a = 30^\circ, b = 60^\circ$ (b) $a = 45^\circ, b = 45^\circ$ (c) $a = 40^\circ, b = 50^\circ$ (d) $a = 35^\circ, b = 55^\circ$

17. In Fig., if TP and TQ are tangents drawn from an external point T to a circle with centre such that $\angle TQP = 60^\circ$, then $\angle OPQ =$



(a) 25° (b) 30° (c) 40° (d) 60°

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

(a) $\frac{3\sqrt{3}}{2}cm$ (b) $6\,cm$ (c) $3\,cm$ (d) $3\sqrt{3}\,cm$