



INDIAN SCHOOL NIZWA - WORKSHEET

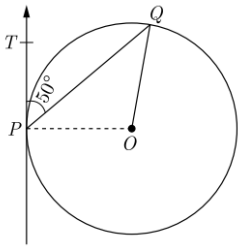
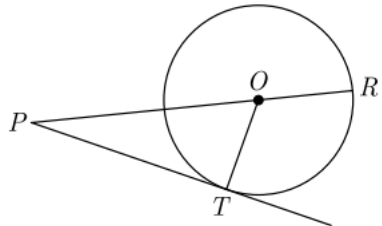
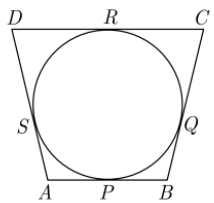
MATHEMATICS

10. Circles

Name: _____

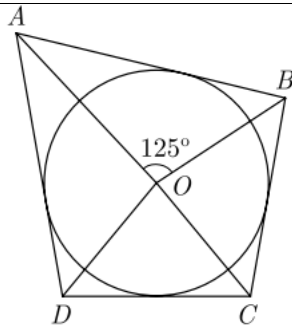
Date: _____

Class: X Sec: ____

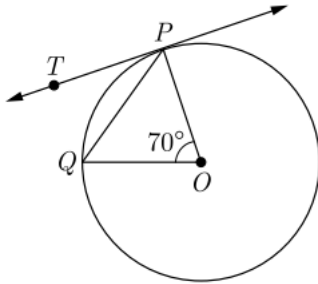
1.	For given two non intersecting circles, maximum number of tangents can be drawn are _____.
2.	If two tangents are inclined at 120° , then angle formed at the centre by the line segments joining the point of contacts is _____.
3.	At a given point on the circle, how many tangents can be drawn? a) 1 b) 2 c) 3 d) 4
4.	From an external point Q, the length of tangent to a circle is 12 cm and the distance of Q from the centre of circle is 13 cm. The radius of circle (in cm) is _____ a) 10 b) 5 c) 12 d) 7
5.	In the given figure, O is the centre of circle. PQ is a chord and PT is tangent at P which makes angle of 50° with PQ. Find $\angle POQ$.
	
6.	In the given figure, on a circle of radius 7cm, tangent PT is drawn from a point P such that $PT=24$ cm. If O is the centre of the circle, then the length of PR is _____
	
7.	AB and CD are two common tangents to circles which touch each other at a point C. If D lies on AB such that $CD = 4$ cm then AB is _____.
8.	In the given figure, a circle touches all the four sides of quadrilateral ABCD with $AB=6$ cm, $BC=7$ cm and $CD=4$ cm, then length of AD is _____
	
9.	Two concentric circles are of radii 10 cm and 8 cm, then the length of the chord of the larger circle which touches the smaller circle is _____.
10.	From an external point P, tangents PA and PB are drawn to a circle with centre O. If CD is the tangent to the circle at a point E and $PA = 14$ cm. The perimeter of $\triangle PCD$ is _____
11.	In the given figure, if $\angle AOB = 125^\circ$, then $\angle COD =$ _____



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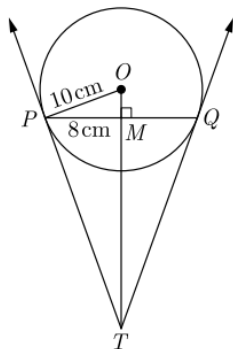


12. In the given figure, O is the centre of the circle, PQ is a chord and PT is tangent to the circle at P . Find $\angle TPQ$.

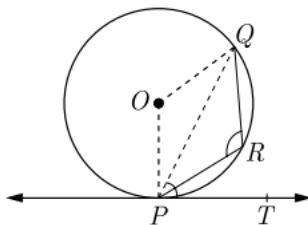


13. Prove that opposite sides of a quadrilateral circumscribing a circle subtend supplementary angles at the centre of the circle.

14. In figure, PQ , is a chord of length 16 cm, of a circle of radius 10 cm. The tangents at P and Q intersect at a point T . Find the length of TP .



15. In the given figure, PQ is a chord of a circle and PT is a tangent. If $\angle QPT = 60^\circ$, find $\angle PRQ$.



16. Prove that the parallelogram circumscribing a circle is a rhombus.