



INDIAN SCHOOL DARSAIT

DEPARTMENT OF MATHEMATICS



Subject : Mathematics	Topic : Circles	
Worksheet no: 11		
Resource Person: Mrs. Anu Likson		Date : _____
Name of the Student : _____	Class & Division : IX	Roll Number : ____

	Section A (Basic Skill)	Marks
	Answer the following questions:	
1.	$(12 + 2.5 + 3.2) - (4.5 \times 1.2)$	1
2.	$100 + 25 - 15 \times 10 + 2$	1
3.	$125 \div 5 + 12 \times 5$	1
4.	$900 - 30 + 27 + 10.$	1
	Section B	
	Answer the following questions:	
1.	<p>In the given figure , if O is the centre of circle and $\angle OBA = 30^\circ$, determine $\angle APB$.</p> <div style="text-align: center;"> </div>	2
2.	<p>In the given figure , find the value of x</p> <div style="text-align: center;"> </div>	2
3.	Prove that the sum of either pair of opposite angles of a cyclic quadrilateral is 180° .	3
4.	AB and CD are two parallel chords on the same side of the circle. AB = 6cm, CD = 8cm. The small chord is at a distance of 4cm from the centre. At what distance from the centre is the other chord?	3



INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS



5.	The radius of a circle is 5cm and the length of a chord in the circle is 8cm. Find the distance of the chord from the centre of the circle.	3
6.	In the figure, ABCD is a cyclic quadrilateral in which AC and BD are diagonal. If $\angle ABC = 55^{\circ}$, and $\angle BAC = 45^{\circ}$, find $\angle BCA$.	3
7.	In the adjoining figure if $\angle DAB = 60^{\circ}$ and $\angle ACB = 70^{\circ}$, find the measure of $\angle DBA$.	2

Section C

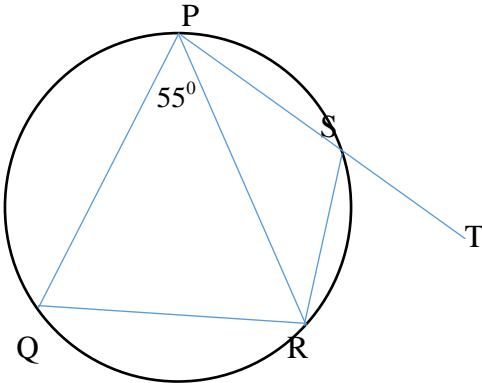
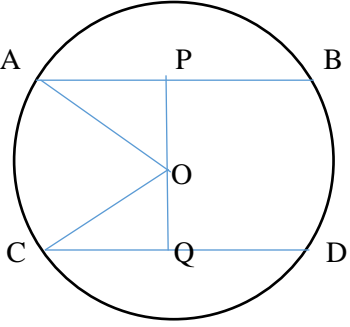
Answer the following questions:

1.	In the following figure, AB is a diameter of the circle with centre O. If AC and BD are perpendiculars on a line PQ and BD meets the circle at E, then prove that $AC = ED$.	4



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2.	<p>In the given figure, $PQ = QR$, if $\angle QPR = 55^\circ$, find $\angle TSR$.</p> 	4
3.	<p>In figure, O is the centre of the circle of radius 5cm, OP is perpendicular to AB, OQ is perpendicular to CD, AB is parallel to CD, AB = 6cm, CD = 8cm, Determine PQ.</p> 	4