THIRUVANANTHAPURAM EDUCATIONAL DISTRICT

MATHEMATICS WORKSHEET 2021-22 - STANDARD X

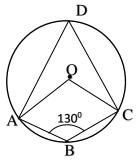


UNIT 2 – CIRCLES

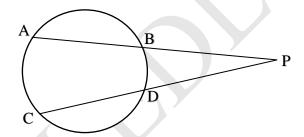


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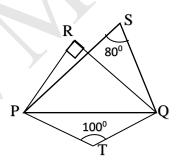
1.In the figure A, B, C, D are points on the circle with centre O. < B=130 $^{\circ}$



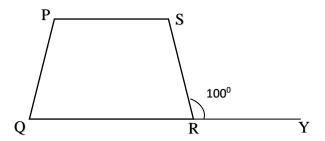
- a) What is the measure of <D?
- b) What is the central angle of arc ABC?
- 2. In the figure PA=14cm, AB=6cm, PC=16cm. Find the length of PD?



3. If we draw a circle with PQ as the diameter in the following figure,

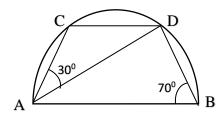


- a) Whether the point R is inside, outside or on the circle?
- b) Where is the point S?
- c) Where is the point T?
- **4.** In the cyclic quadrilateral PQRS, QR is extended to Y. If $\langle SRY = 100^{\circ}, \langle RPS = 50^{\circ}.$



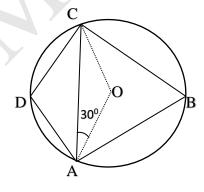
- a) What is <SRQ?
- b) What is <SPQ?
- c) What is <RPQ?
- **5.** Draw a rectangle of sides 5cm,3cm and draw a square of equal area.

6.



C and D are two points on the semicircle with diameter AB. If <ABD= 70° , <DAC= 30° . Then,

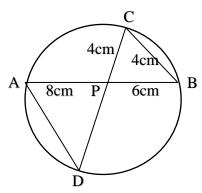
- a) What is <ACD?
- b) What is <CDA?
- c) What is <BDC?
- d) What is <DAB?
- 7. A, B, C and D are points on the circle with centre O. <OAC= 30° ,



- a) What is the measure of <AOC?
- b) What is the measure of <ABC?
- c) What is the measure of <ADC?
- **8.** Draw a triangle with angles 45°,85° and circumradius 3cm.

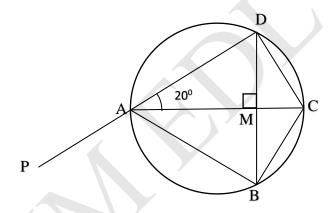
9. In the figure the chords AB and CD intersect at P. If PA=8cm, PB=6cm,

PC=4cm, BC=4cm



- a) Write the angle equal to the measure of <A.
- b) Write one more pair of equal angles.
- c) Write the length of PD.
- d) Write the length of AD.

10. In the figure chord BD is perpendicular to the diameter AC.



Write the measures of the following angles.

- a) <BAC
- b) <BCD
- c) <ADC
- d) <CDM
- e) <BAP

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