

## Unit 12 – Angle in a Segment of a Circle

### Multiple Choice Questions

1. A circle passes through the vertices of a right angled  $\Delta ABC$  with  $m\overarc{AC} = 3\text{cm}$  and  $m\overarc{BC} = 4\text{cm}$ ,  $m\angle C = 90^\circ$ , Radius of the circle is:
- (a) 1.5 cm (b) 2.0 cm  
(c) 2.5 cm (d) 3.5 cm

2. In the adjacent circular figure, central and inscribed angles stand on the same arc AB:
- (a)  $m\angle 1 = m\angle 2$   
(b)  $m\angle 1 = 2m\angle 2$   
(c)  $m\angle 2 = 3m\angle 1$   
(d)  $m\angle 2 = 2m\angle 1$

3. In the adjacent figure if  $m\angle 3 = 75^\circ$ , then find  $m\angle 1$  and  $m\angle 2$

(a)  $37\frac{1}{2}^\circ, 37\frac{1}{2}^\circ$

(b)  $37\frac{1}{2}^\circ, 75^\circ$

(c)  $75^\circ, 37\frac{1}{2}^\circ$

(d)  $75^\circ, 75^\circ$

4. Given that O is the center of the circle, the angle marked x will be:

(a)  $12\frac{1}{2}^\circ$  (b)  $25^\circ$

(c)  $50^\circ$  (d)  $75^\circ$

5. Given that O is the center of the circle the angle marked y will be:

(a)  $12\frac{1}{2}^\circ$  (b)  $25^\circ$

(c)  $50^\circ$  (d)  $75^\circ$

6. In the figure, O is the center of the circle and  $\overleftrightarrow{ABN}$  is a straight line. The obtuse angle  $AOC = x$  is:

(a)  $32^\circ$  (b)  $64^\circ$   
(c)  $96^\circ$  (d)  $128^\circ$

7. In the figure, O is the center of the circle, then the angle x is:
- (a)  $55^\circ$   
(b)  $110^\circ$   
(c)  $220^\circ$   
(d)  $125^\circ$

8. In the figure, O is the center of the circle then angle x is:
- (a)  $15^\circ$   
(b)  $30^\circ$   
(c)  $45^\circ$   
(d)  $60^\circ$

9. In the figure, O is the center of the circle then the angle x is:
- (a)  $15^\circ$   
(b)  $30^\circ$   
(c)  $45^\circ$   
(d)  $60^\circ$

10. In the figure, O is the center of the circle then the angle x is:
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- (a)  $50^\circ$   
(b)  $75^\circ$   
(c)  $100^\circ$   
(d)  $125^\circ$

|    |   |    |   |    |   |    |   |     |   |
|----|---|----|---|----|---|----|---|-----|---|
| 1. | c | 2. | d | 3. | a | 4. | c | 5.  | b |
| 6. | d | 7. | d | 8. | b | 9. | d | 10. | c |