

The radius, diameter, or circumference is given. Find the other measures. Round to the nearest tenth if needed.

1.  $r = 5, d = 10, \text{Circ} = 31.4$

2.  $r = 13.7, d = 26.8, \text{Circ} = 84.2$

3.  $r = 21.8, d = 43.6, \text{Circ} = 136.9$

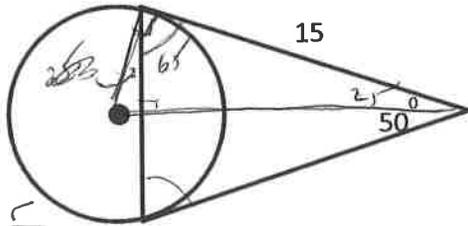
4.  $r = 377.1, d = 754.1, \text{Circ} = 2368$

5.  $r = x, d = 2x, \text{Circ} = 6.28x$

6.  $r = \frac{x}{6}, d = \frac{x}{3}, \text{Circ} = x$

Find the Circumference. Round to the nearest tenth as needed.

7.

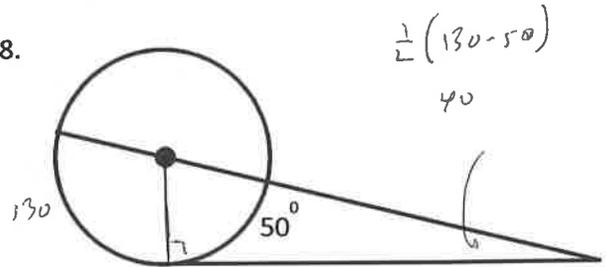


Tan  $25^\circ = \frac{r}{15}$

$r = 7$

Circ =  $43.96$   
 $44$

8.

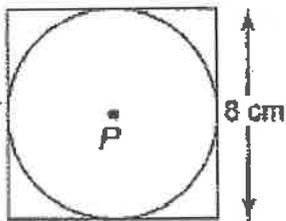


Tan  $40^\circ = \frac{r}{40}$   
 $r = 33.6$

Circ =  $211$

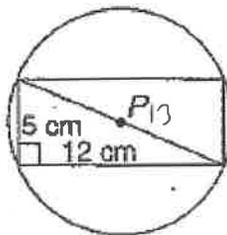
Find the Exact Circumference.

9.



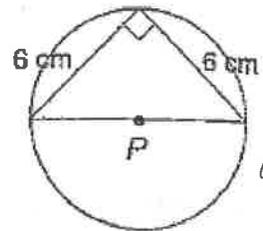
$8\pi$

10.



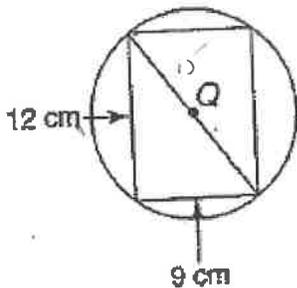
$13\pi$

11.



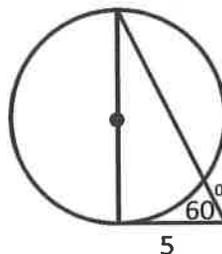
$6\sqrt{2}(\pi)$

12.



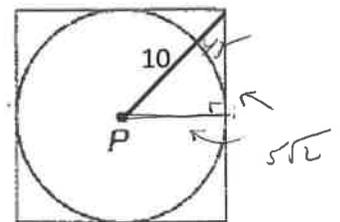
$15\pi$

13.



$5\sqrt{3}(\pi)$

14.



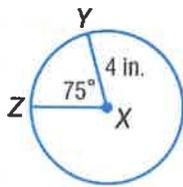
$10\sqrt{2}(\pi)$

Find the length of the indicated arc. Round to the nearest tenth as needed.

15.  $\widehat{ZY}$

$$C_{\text{circ}} = 25.12$$

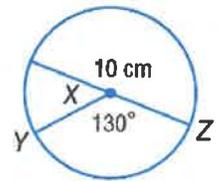
$$\cdot \frac{75}{360} = 5.2$$



16.  $\widehat{ZY}$

$$C_{\text{circ}} = 31.4$$

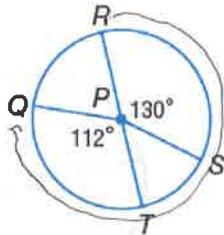
$$\cdot \frac{130}{360} = 11.3$$



17.  $\widehat{RSQ}$ , given  $RT = 15\text{in}$

$$C_{\text{circ}} = 47.1\text{ in}$$

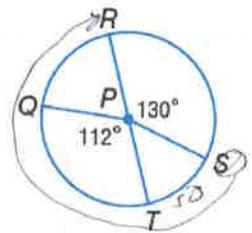
$$\cdot \frac{292}{360} = 38.2\text{ in}$$



18.  $\widehat{STR}$ , given  $PQ = 3\text{ meters}$

$$C_{\text{circ}} = 18.84$$

$$\cdot \frac{230}{360} = 12\text{ m}$$

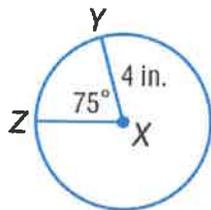


Find the area of the sector indicated. Round to the nearest tenth as needed.

19. Sector  $YZX$

$$A_{\text{area}} = 50.24\text{ in}^2$$

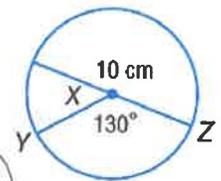
$$\cdot \frac{75}{360} = 10.5\text{ in}^2$$



20. Sector  $XYZ$

$$A_{\text{area}} = 78.5\text{ cm}^2$$

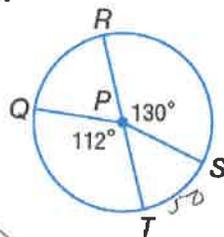
$$\cdot \frac{130}{360} = 28.3\text{ cm}^2$$



21. Sector  $STP$ , given  $TR = 26\text{in}$

$$A_{\text{area}} = 530.66\text{ in}^2$$

$$\cdot \frac{50}{360} = 73.7\text{ in}^2$$



22. Sector  $QSP$ , given  $PQ = 2\text{ meters}$

$$A_{\text{area}} = 12.56\text{ m}^2$$

$$\cdot \frac{162}{360} = 5.7\text{ m}^2$$

