Unit 7 Review Name: _____

Find the arc length of the circle with the following dimensions to the nearest whole number.

1. radius = 14, Radians = $\frac{3\pi}{7}$

_____

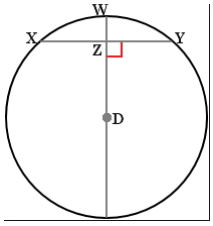
2. radius = 6, Radians = $\frac{13\pi}{3}$

_____

3. radius = 21, Radians = $\frac{7\pi}{5}$

_____

Use the circle to answer the following. Round to the nearest tenth if necessary.



4. Radius = 13

$\overline{ZD} = 5$

What is $\overline{ZY}$?

_____

5. Radius = 17

$\overline{XY} = 16$

What is $\overline{ZD}$?

_____

6. Diameter = 28

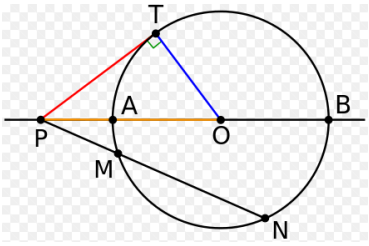
$\overline{WZ} = 5$

What is $\overline{ZY}$?

_____

Use the circle to answer the following. Round to the nearest tenth if necessary.

Assume $\overline{PT}$ is a tangent line.



7. $\overline{PO} = 10$

$\overline{TO} = 6$

What is $\overline{PT}$?

_____

8. $\overline{PA} = 32$

$\overline{AO} = 9$

What is $\overline{PT}$?

_____

9. Diameter = 34

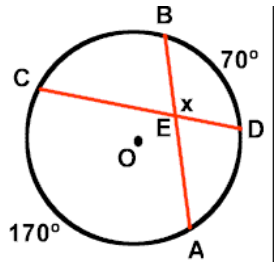
$\overline{PA} = 11$

What is $\overline{PT}$?

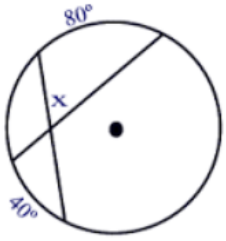
_____

Find *x*.

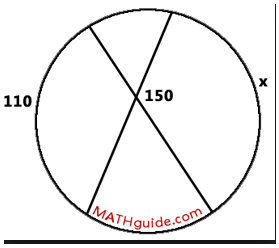
10.



11.

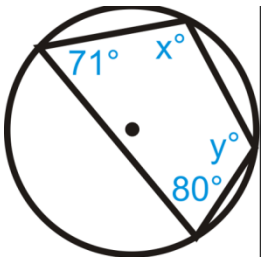


12.

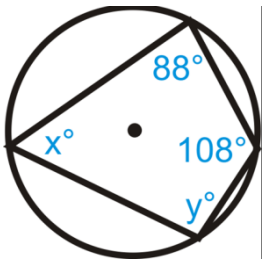


Find *x* and *y*.

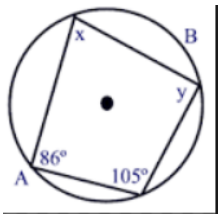
13.



14.

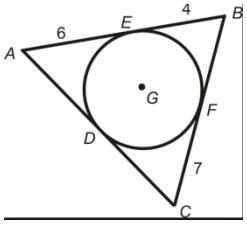


15.

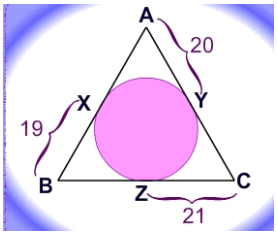


Find the perimeter of the triangle.

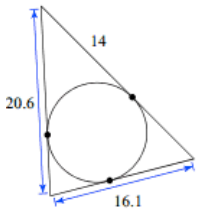
16.



17.



18.



Find the coordinates of the center and the length of the radius of the circles with the following equations.

19. $x^2 + y^2 + 8y = 20$

20. $x^2 - 10x + y^2 = 56$

21. $x^2 + 6x + y^2 - 4y = 51$