

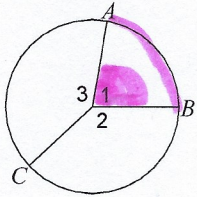
Ch 10 Circles Quiz

Name Key

Date \_\_\_\_\_

Name the arc made by the given angle.

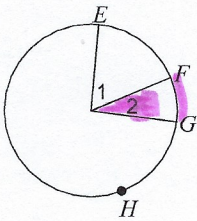
1) Major arc for  $\angle 1$



$$\angle 1 = \boxed{\widehat{AB}}$$

Name the central angle of the given arc.

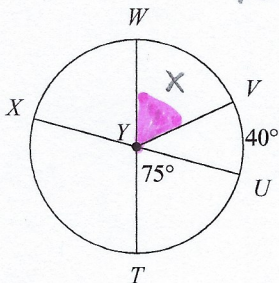
2)  $\widehat{FG}$



$$\widehat{FG} = \boxed{\angle 2}$$

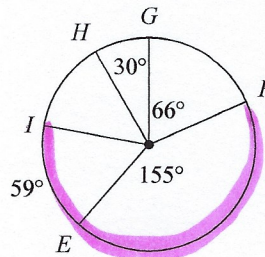
Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

3)  $m\angle WYV$



$$\begin{aligned} 75 + 40 + X &= 180 \\ 115 + X &= 180 \\ X &= 180 - 115 \\ X &= \boxed{65^\circ} \end{aligned}$$

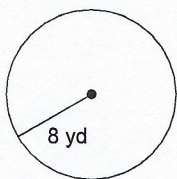
4)  $m\widehat{FEI}$



$$\begin{aligned} m\widehat{FEI} &= 155 + 59 \\ &= \boxed{214^\circ} \end{aligned}$$

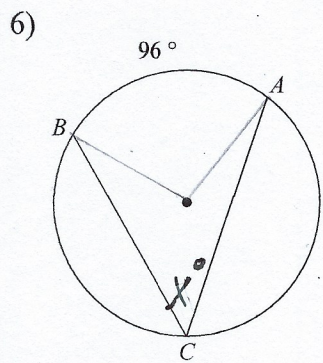
Find the circumference of this circle. Use your calculator's value of  $\pi$ . Round your answer to the nearest tenth.

5)



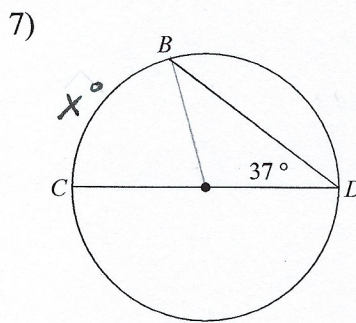
$$\begin{aligned} C &= 2\pi r \\ &= 2\pi(8) \\ &= \boxed{16\pi \text{ yd}} \\ &= 50.3 \text{ yd.} \end{aligned}$$

Find the measure of the arc or angle indicated.



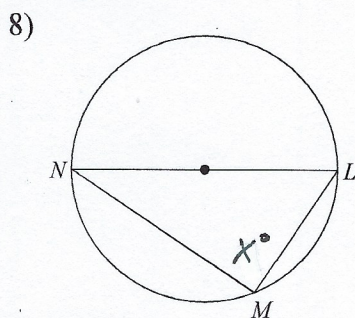
$$x = \frac{1}{2}(96^\circ)$$

$$= \boxed{48^\circ}$$

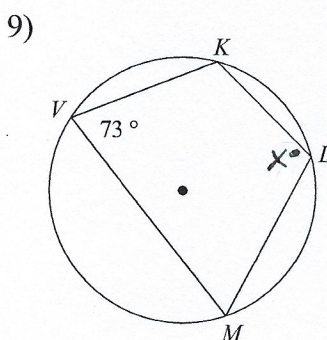


$$x = 2(37)$$

$$= \boxed{74^\circ}$$



$$x = 90^\circ$$

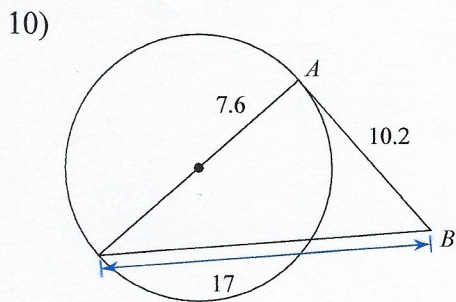


$$73 + x = 180$$

$$x = 180 - 73$$

$$x = \boxed{107^\circ}$$

Determine if line AB is tangent to the circle.



$$(7.6)^2 + (10.2)^2 \stackrel{?}{=} (17)^2$$

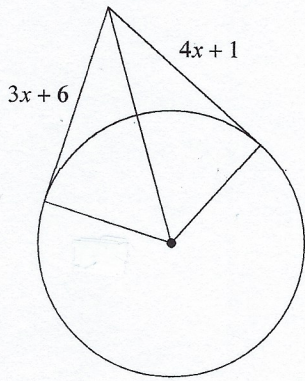
$$57.76 + 104.04 = 289$$

$$161.8 \neq 289$$

$\overline{AB}$  is not tangent to the circle

Solve for  $x$ . Assume that lines which appear to be tangent are tangent.

11)



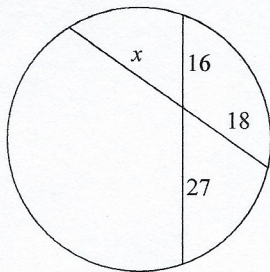
$$4x+1 = 3x+6$$

$$4x-3x = 6-1$$

$$x = \boxed{5}$$

Solve for  $x$ .

12)



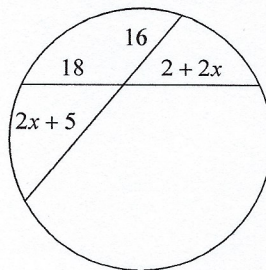
$$18x = 16(27)$$

$$18x = 432$$

$$x = \frac{432}{18}$$

$$x = \boxed{24}$$

13)



$$18(2+2x) = 16(2x+5)$$

$$36 + 36x = 32x + 80$$

$$36x - 32x = 80 - 36$$

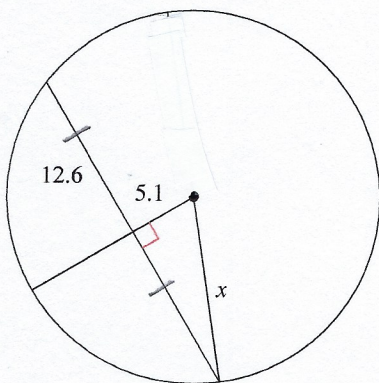
$$4x = 44$$

$$x = \frac{44}{4}$$

$$x = \boxed{11}$$

Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

14)



$$(5.1)^2 + (12.6)^2 = x^2$$

$$26.01 + 158.76 = x^2$$

$$184.77 = x^2$$

$$\sqrt{184.77} = x$$

$$\boxed{13.6} = x$$