

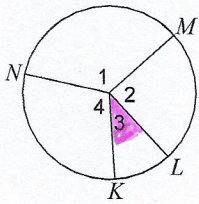
Ch 10 Circles Quiz Review

Name Key

Date _____

Name the arc made by the given angle.

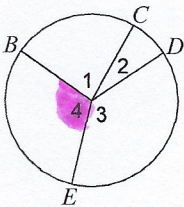
1) $\angle 3$



$$\angle 3 = \boxed{\widehat{KL}}$$

Name the central angle of the given arc.

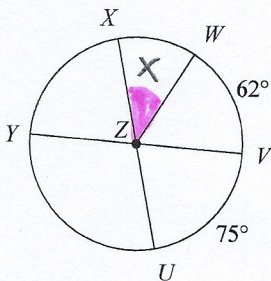
2) \widehat{BE}



$$\widehat{BE} = \boxed{\angle 4}$$

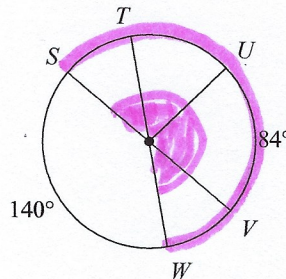
Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

3) $m\angle XZW$



$$\begin{aligned} 62^\circ + 75^\circ + X^\circ &= 180 \\ 137 + X^\circ &= 180 \\ X &= 180 - 137 \\ X &= \boxed{43^\circ} \end{aligned}$$

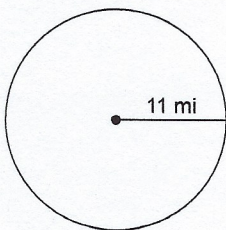
4) $m\widehat{SUW}$



$$360 - 140 = \boxed{220^\circ}$$

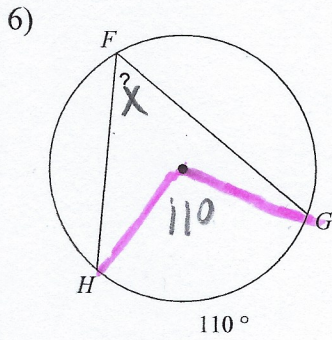
Find the circumference of this circle. Use your calculator's value of π . Round your answer to the nearest tenth.

5)



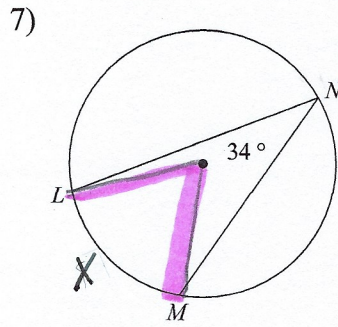
$$\begin{aligned} C &= 2\pi r \\ &= 2\pi(11) \\ &= \boxed{22\pi \text{ mi}} \end{aligned}$$

Find the measure of the arc or angle indicated.



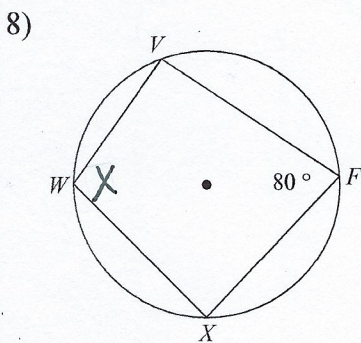
$$X = \frac{1}{2}(110)$$

$$= \boxed{55^\circ}$$



$$X = 2(34)$$

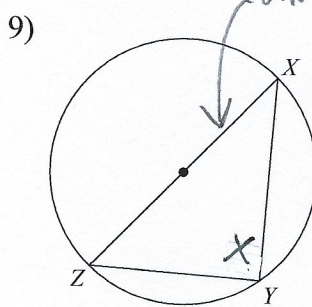
$$= \boxed{68^\circ}$$



$$X + 80 = 180$$

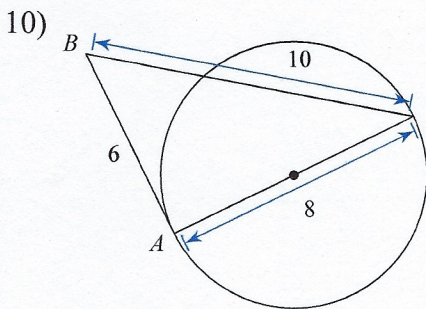
$$X = 180 - 80$$

$$X = \boxed{100^\circ}$$



$$X = \boxed{90^\circ}$$

Determine if line AB is tangent to the circle.



$$8^2 + 6^2 \stackrel{?}{=} 10^2$$

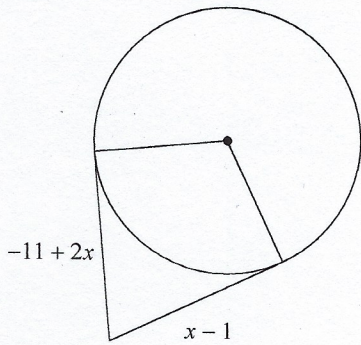
$$64 + 36 = 100$$

$$100 = 100 \checkmark$$

Yes, \overline{AB} is tangent to the circle

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

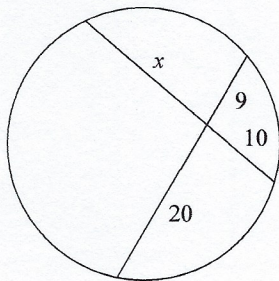
11)



$$\begin{aligned} -11 + 2x &= x - 1 \\ 2x - x &= 11 - 1 \\ x &= \boxed{10} \end{aligned}$$

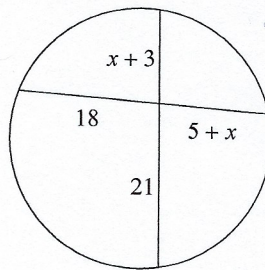
Solve for x .

12)



$$\begin{aligned} 10x &= 9(20) \\ 10x &= 180 \\ x &= \boxed{18} \end{aligned}$$

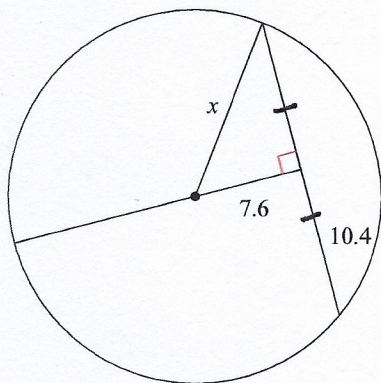
13)



$$\begin{aligned} 21(x+3) &= 18(5+x) \\ 21x + 63 &= 90 + 18x \\ 21x - 18x &= 90 - 63 \\ 3x &= 27 \\ x &= \frac{27}{3} \\ x &= \boxed{9} \end{aligned}$$

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

14)



$$\begin{aligned} 10.4^2 + 7.6^2 &= x^2 \\ 108.16 + 57.76 &= x^2 \\ 165.92 &= x^2 \\ \sqrt{165.92} &= x \\ \boxed{12.9} &= x \end{aligned}$$