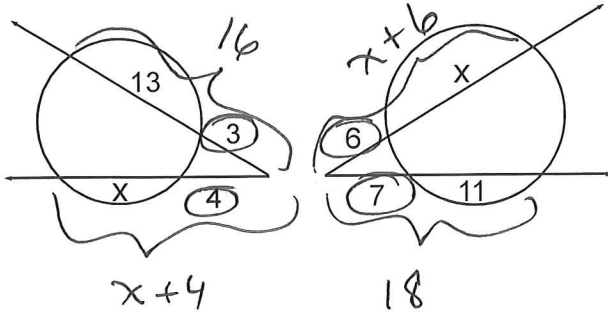


Chapter 9 Practice Problems A

Name: Key

1.) Two secants drawn from the same point outside the circle. Find x.



$$4(x+4) = 3(16)$$

$$4x + 16 = 48$$

$$\begin{array}{r} -16 \\ -16 \end{array}$$

$$\frac{4x}{4} = \frac{32}{4}$$

$$\boxed{x = 8}$$

$$6(x+6) = 7(18)$$

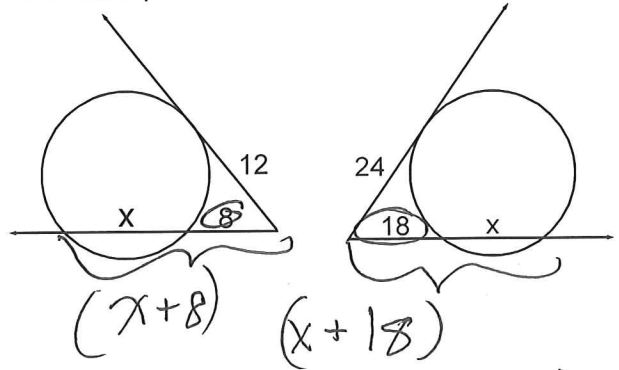
$$6x + 36 = 126$$

$$\begin{array}{r} -36 \\ -36 \end{array}$$

$$\frac{6x}{6} = \frac{90}{6}$$

$$\boxed{x = 15}$$

2.) One secant and one tangent drawn from the same point outside the circle. Find x.



$$8(x+8) = 12^2$$

$$8x + 64 = 144$$

$$8x = 80$$

$$\boxed{x = 10}$$

$$18(x+18) = 24^2$$

$$18x + 324 = 576$$

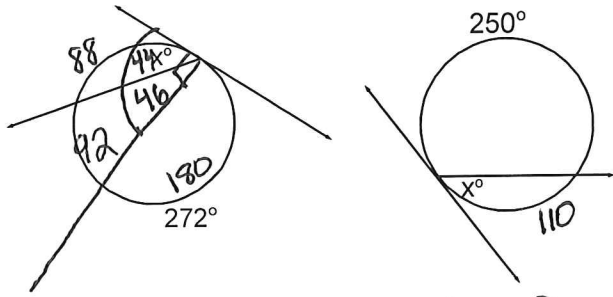
$$\begin{array}{r} -324 \\ -324 \end{array}$$

$$18x = 252$$

$$\boxed{x = 14}$$

Using Inscribed Angle Relationships to find missing information

3.) Find the value of x using the diagram below

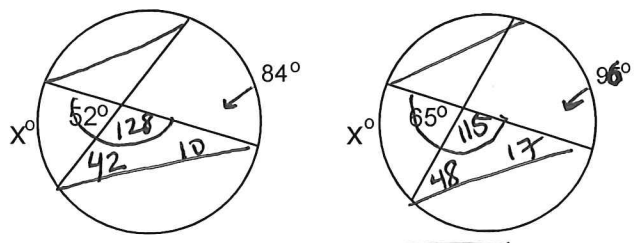


$$x = \frac{1}{2}(110)$$

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

Using Inscribed Angle Relationships to find missing information

4.) Find the value of x using the diagram below



$$\boxed{x = 20}$$

$$\boxed{x = 34}$$