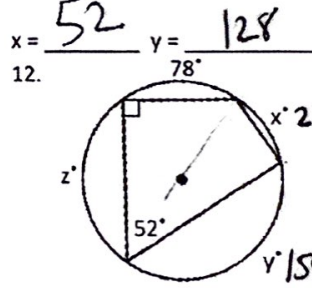
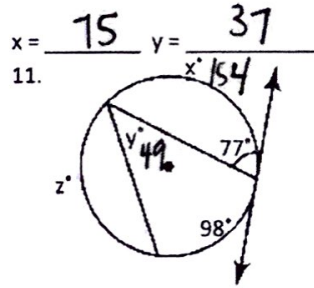
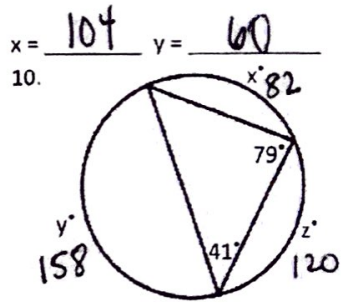
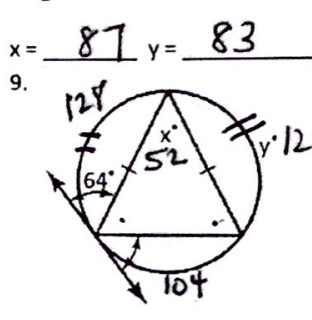
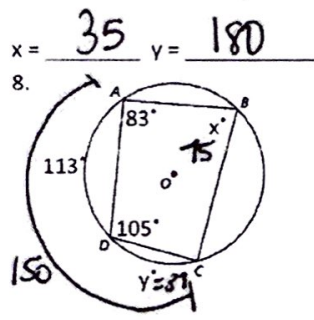
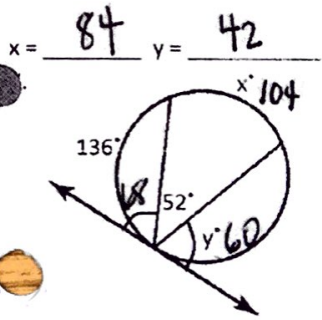
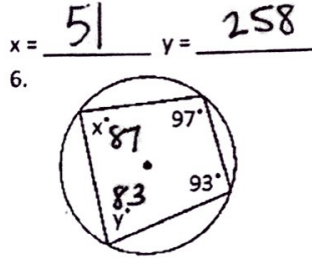
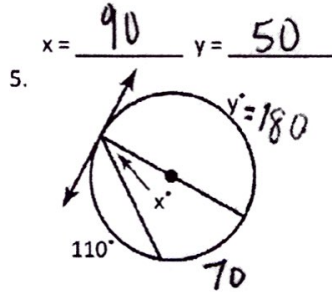
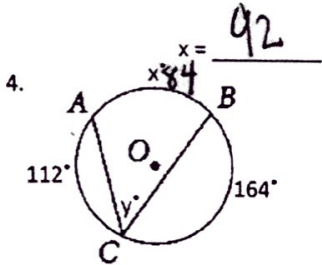
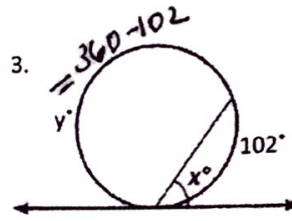
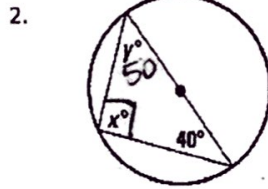
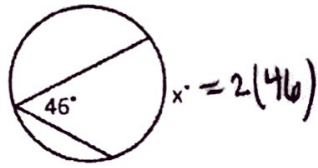


Find the value of each variable.

SHOW WORK

Inscribed angle =  $\frac{1}{2}$  · intercepted arc

Name Key



$x = 82$   $y = 158$   $z = 120$   $x = 154$   $y = 49$   $z = 108$   $x = 26$   $y = 154$   $z = 102$

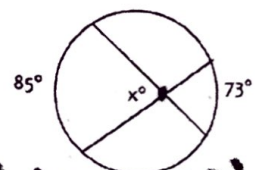
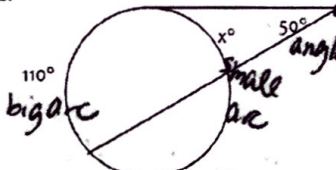
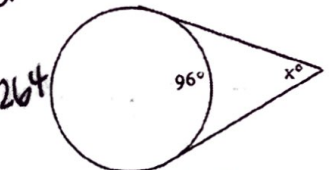
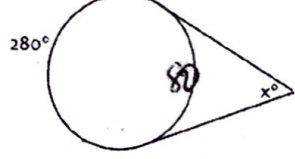
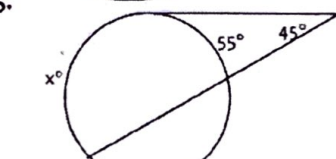
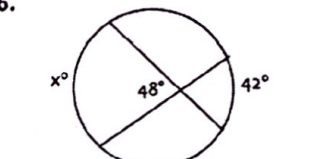
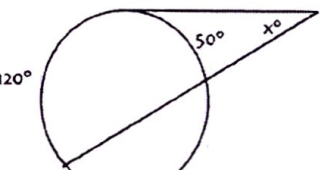
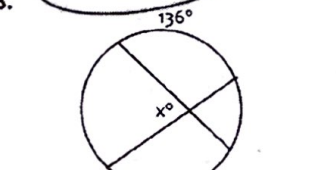
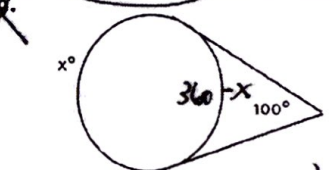
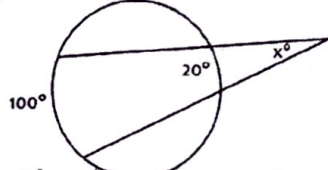
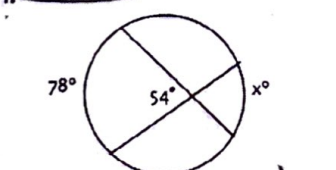
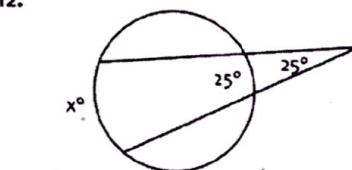
*al sech...*

# Circles Quiz Review Homework

Name McG Kay  
Date \_\_\_\_\_ Block \_\_\_\_\_

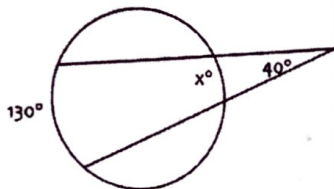
Write an equation and solve to find the value of x in each diagram.

All segments that appear to be tangent are!

<p>1.</p>  $x = \frac{1}{2}(85 + 73)$ $x = 79$	<p>2.</p>  $50 = \frac{1}{2}(110 - x)$ $100 = 110 - x$ $x = 10$	<p>3.</p>  $x = \frac{1}{2}(264 - 96)$ $x = 84$
<p>4.</p>  $x = \frac{1}{2}(280 - 80)$ $x = 100$	<p>5.</p>  $45 = \frac{1}{2}(x - 55)$ $90 = x - 55$ $x = 145$	<p>6.</p>  $48 = \frac{1}{2}(x + 42)$ $96 = x + 42$ $x = 54$
<p>7.</p>  $x = \frac{1}{2}(120 - 50)$ $x = \frac{1}{2}(70) = 35$	<p>8.</p>  $x = \frac{1}{2}(136 + 96)$ $x = 116$	<p>9.</p>  $100 = \frac{1}{2}(x - (360 - x))$ $200 = 2x - 360$ $x = 280$
<p>10.</p>  $x = \frac{1}{2}(100 - 20)$ $x = \frac{1}{2}(80) = 40$	<p>11.</p>  $54 = \frac{1}{2}(78 + x)$ $108 = 78 + x$ $x = 30$	<p>12.</p>  $25 = \frac{1}{2}(x - 25)$ $50 = x - 25$ $75 = x$

Round any decimal answers to the nearest tenth.

13.

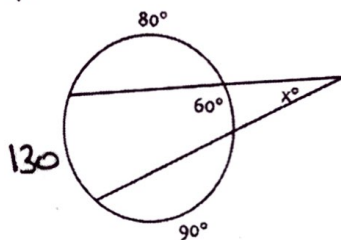


$$40 = \frac{1}{2}(130 - x)$$

$$80 = 130 - x$$

$$x = 50$$

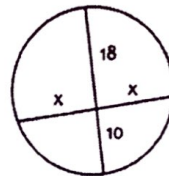
14.



$$x = \frac{1}{2}(130 - 60)$$

$$= \frac{1}{2}(70) = 35$$

15.

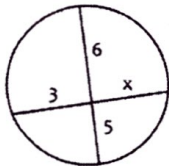


$$x^2 = 18(10)$$

$$x^2 = 180 \Rightarrow x = 6\sqrt{5}$$

$$13.42$$

16.

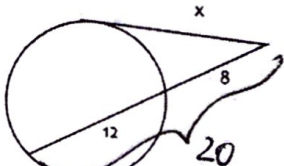


$$3 \cdot x = 6 \cdot 5$$

$$3x = 30$$

$$x = 10$$

17.

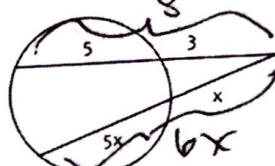


$$x^2 = 8(20)$$

$$x^2 = 160$$

$$x = 4\sqrt{10} \approx 12.65$$

18.

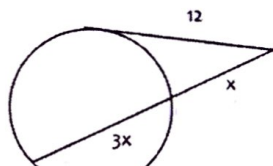


$$3(8) = x(6x)$$

$$24 = 6x^2$$

$$4 = x^2 \Rightarrow x = 2$$

19.



$$12^2 = x(4x)$$

$$144 = 4x^2$$

$$36 = x^2 \Rightarrow x = 6$$

20.

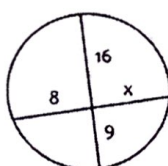


$$x^2 = 5(15)$$

$$x^2 = 75$$

$$x = 5\sqrt{3} \approx 8.66$$

21.

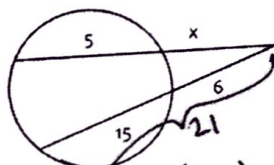


$$8x = 16 \cdot 9$$

$$8x = 144$$

$$x = 18$$

22.



$$x(x+5) = 6(21)$$

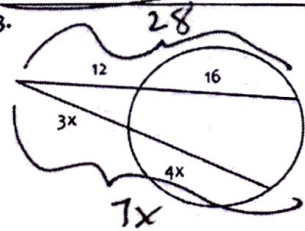
$$x^2 + 5x = 126$$

$$x^2 + 5x - 126 = 0$$

$$(x-9)(x+14) = 0$$

$$x = 9$$

23.



$$12 \cdot 28 = 3x(7x)$$

$$336 = 21x^2$$

$$16 = x^2$$

$$x = 4$$

24.  $\overline{AB}$  is a diameter



$$4x = 64$$

$$x = 16$$

29