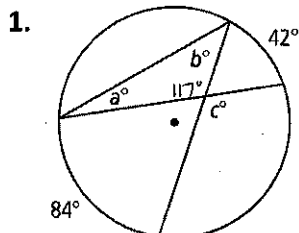


Name: key  
 Geometry

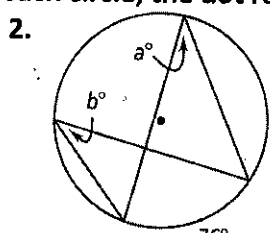
Date: \_\_\_\_\_  
 Band: \_\_\_\_\_

### Unit 9: Circles PBA Practice

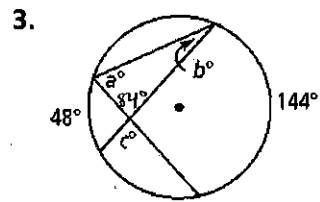
Find the value of each variable. For each circle, the dot represents the center.



$a = \frac{1}{2} 42$     $b = \frac{1}{2} 84$     $c = 117^\circ$   
 $a = 21^\circ$     $b = 42^\circ$

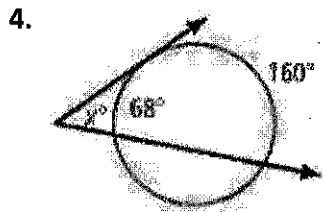


$a = \frac{1}{2} 76$     $b = \frac{1}{2} 76$   
 $a = 38^\circ$     $b = 38^\circ$

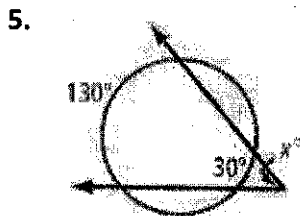


$a = \frac{1}{2} 144$     $b = \frac{1}{2} 48$   
 $a = 72^\circ$     $b = 24^\circ$   
 $c = 84^\circ$

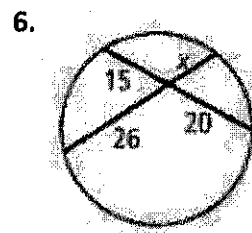
Find the value of the variable(s).



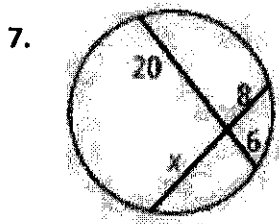
$x = \frac{1}{2} (160 - 68)$   
 $= \frac{1}{2} (92)$   
 $x = 46^\circ$



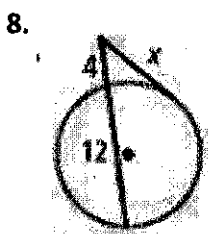
$x = \frac{1}{2} (130 - 30)$   
 $= \frac{1}{2} (100)$   
 $x = 50^\circ$



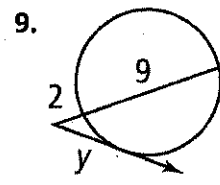
$26x = 15 \cdot 20$   
 $26x = 300$   
 $x = \frac{150}{13}$



$8x = 20 \cdot 6$   
 $8x = 120$   
 $x = 15$



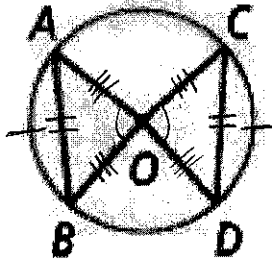
$x^2 = 4(4 + 12)$   
 $x^2 = 4(16)$   
 $x^2 = 64$   
 $x = 8$



$y^2 = 2(2 + 9)$   
 $y^2 = 2(11)$   
 $y^2 = 22$   
 $y = \sqrt{22}$

10. Given:  $\odot O$  with arcs  $AB \cong CD$

Prove:  $\triangle AOB \cong \triangle COD$



$\odot O$  with  $\widehat{AB} \cong \widehat{CD}$

Given

$\overline{AB} \cong \overline{CD}$   
 $\angle AOB \cong \angle COD$

$\cong$  arcs have  $\cong$  chords  
and  $\cong$  central  $\angle$ 's

$\overline{AO} \cong \overline{CO} \cong \overline{BO} \cong \overline{DO}$

All radii are  $\cong$

$\triangle AOB \cong \triangle COD$

SSS or SAS