

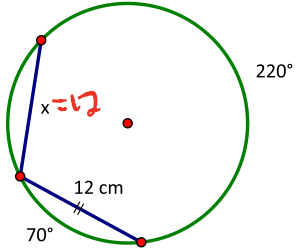
# Circles – Chord Theorems

G.C.A.2

Hw Section 13.2

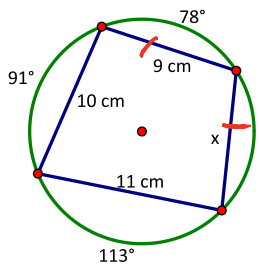
Name \_\_\_\_\_

1. Find the value of  $x$ .



$x = 12\text{ cm}$

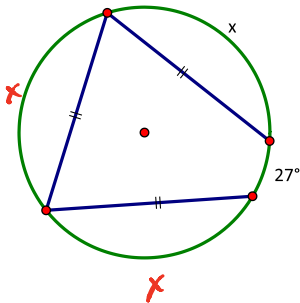
2. Find the value of  $x$ .



$78^\circ + 91^\circ + 113^\circ + x = 360^\circ$   
 $282 + x = 360$   
 $x = 78$   
 $x = 78^\circ$

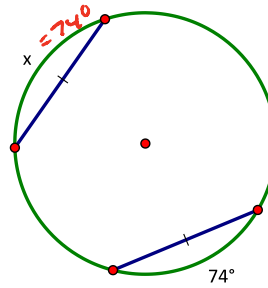
$x = 9\text{ cm}$

3. Find the value of  $x$ .



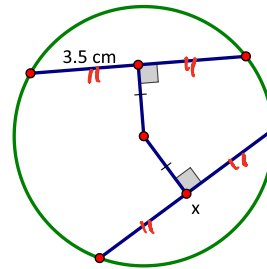
$x + x + 27^\circ = 360^\circ$   
 $3x = 333$   
 $x = 111^\circ$

4. Find the value of  $x$ .



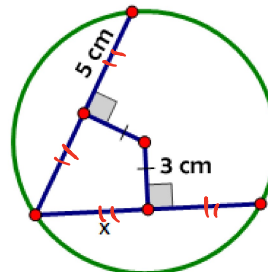
$x = 74^\circ$

5. Find the value of  $x$ .



$x = 2(3.5)$   
 $x = 7\text{ cm}$

6. Find the value of  $x$ .



$x = 5$

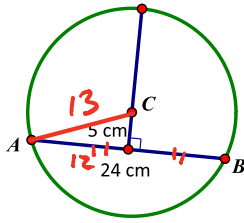
# Circles – Chord Theorems

G.C.A.2

Hw Section 13.2

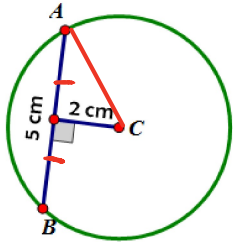
Name \_\_\_\_\_

7. Determine the length of the radius  $\overline{AC}$ .



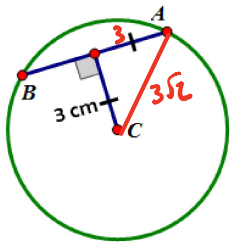
Pythag Triple  
 $5-12-13$   
 $AC = 13 \text{ cm}$

8. Determine the length of the radius  $\overline{AC}$ . Give exact answer.



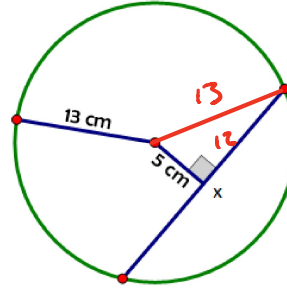
$x^2 + y^2 = r^2$   
 $(2.5)^2 + (2)^2 = AC^2$   
 $6.25 + 4 = AC^2$   
 $10.25 = AC^2$   
 $\pm\sqrt{10.25} = AC$   
 $\sqrt{10.25} = AC$

9. Determine the length of the radius  $\overline{AC}$ . Give exact answer.



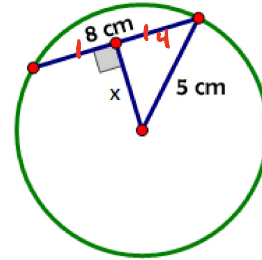
$45^\circ-45^\circ-90^\circ$   
 $AC = 3\sqrt{2} \text{ cm}$

10. Find the value of x.



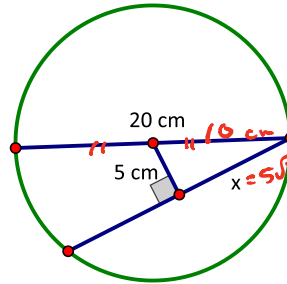
P.T  
 $5-12-13$   
 $x = 2(12)$   
 $x = 24 \text{ cm}$

11. Find the value of x.



P.T.  
 $3-4-5$   
 $x = 3 \text{ cm}$

12. Find the value of x. Give exact answer.



$30^\circ-60^\circ-90^\circ$   
 $x = 5\sqrt{3} \text{ cm}$

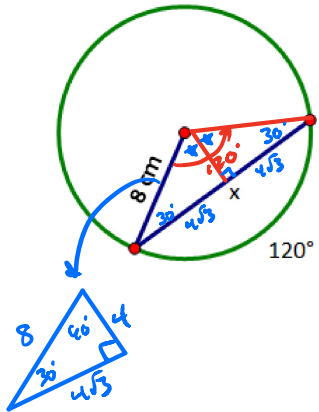
# Circles – Chord Theorems

G.C.A.2

Hw Section 13.2

Name \_\_\_\_\_

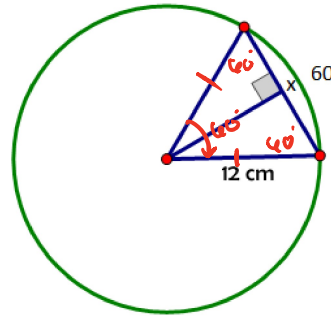
13. Find the value of  $x$ . Give exact answer.



30-60-90

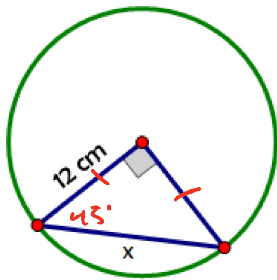
$x = 2(4\sqrt{3})$   
 $x = 8\sqrt{3} \text{ cm}$

16. Find the value of  $x$ . Give exact answer.



$x = 12$

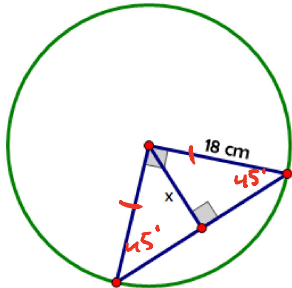
14. Find the value of  $x$ . Give exact answer.



45-45-90

$x = 12\sqrt{2} \text{ cm}$

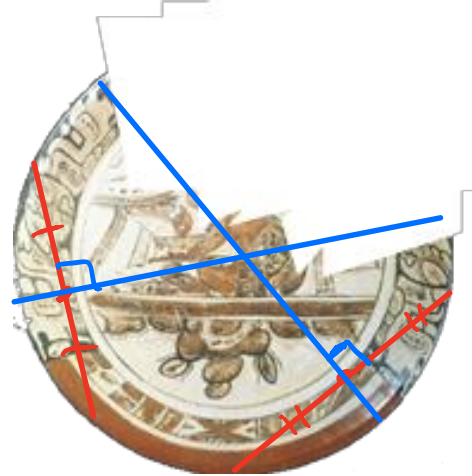
15. Find the value of  $x$ . Give exact answer.



45-45-90

$x\sqrt{2} = 18$   
 $x = \frac{18}{\sqrt{2}}$   
 $x = \frac{18\sqrt{2}}{2}$   
 $x = 9\sqrt{2} \text{ cm}$

17. An ancient plate from the Mayan time period was drop at a museum. The curator wanted to put it back together but needed to find the center of the place to reference the restoration. If the largest piece looked like this... how could they find the center of the plate?



Draw two chords, then construct the  $\perp$  bisectors of each chord. The  $\perp$  bisectors will intersect at the center of circle.

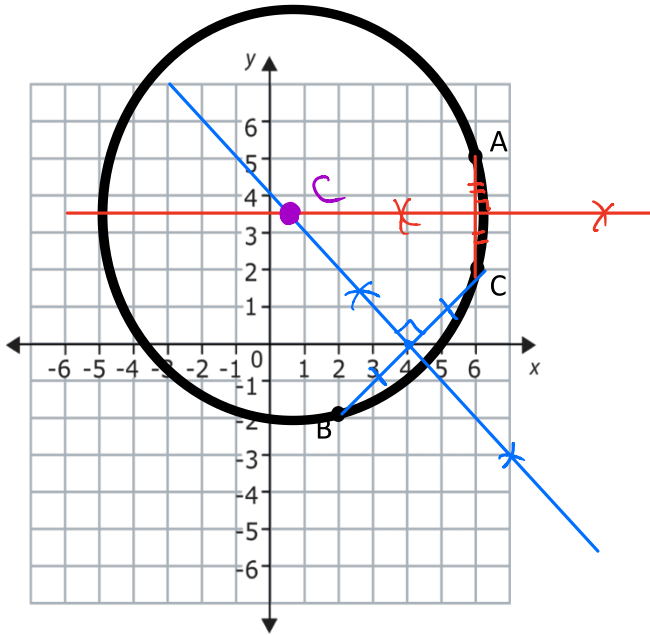
# Circles – Chord Theorems

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Hw Section 13.2

Name \_\_\_\_\_

18. Construct the circle that contains the given points.



19. Construct the circle that contains the given points.

