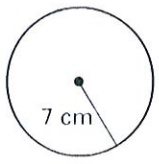
Name _____ Date _____

LESSON 6.7 Practice

Use the diagram to find the indicated measure.

1. Find the circumference.

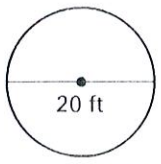


$C = 2\pi(7)$

$= 14\pi$

$= 44$

2. Find the circumference.



$C = 20\pi$

$= 62.8$

3. Find the radius.

$C = 48$ in.

$\frac{48}{2\pi} = \frac{2\pi r}{2\pi}$

$r = 7.6$

$r = \frac{24}{\pi}$

Find the indicated measure.

4. The exact radius of a circle with circumference 36 meters

$36 = 2\pi r$ $\quad \frac{18}{\pi} = 5.7$

5. The exact diameter of a circle with circumference 29 feet

$29 = \pi d$ $\quad \frac{29}{\pi} = 9.2$

6. The exact circumference of a circle with diameter 26 inches

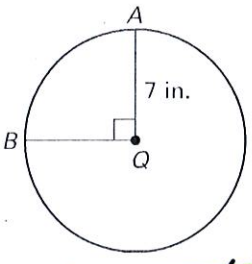
$26\pi = 81.7$

7. The exact circumference of a circle with radius 15 centimeters

$2\pi(15) = 30\pi = 94.2$

Find the length of $\overset{\frown}{AB}$.

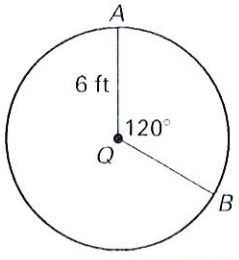
8.



$\frac{90}{360} \cdot 2\pi(7)$

$\frac{7\pi}{2} = 11$

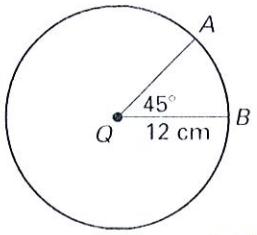
9.



$\frac{120}{360} \cdot 2\pi(6)$

$4\pi = 12.6$

10.



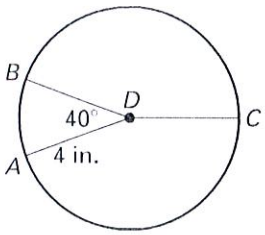
$\frac{45}{360} \cdot 2\pi(12)$

$3\pi = 9.4$

Name _____ Date _____

LESSON 6.7 **Practice** *continued*

In ⊙*D* shown below, ∠*ADC* ≅ ∠*BDC*. Find the indicated measure.



11. $m\overset{\frown}{ACB}$

320

360-40

12. $m\overset{\frown}{CB}$

160

320/2

13. Length of $\overset{\frown}{ACB}$

$\frac{320}{360} \cdot 2\pi(4)$

$\frac{64\pi}{9} = 22.3$

14. Length of $\overset{\frown}{CB}$

$\frac{160}{360} \cdot 2\pi(4)$

$\frac{32\pi}{9} = 11.2$

15. $m\overset{\frown}{ABC}$

200

40+160

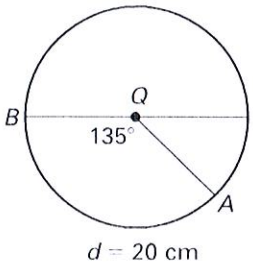
16. Length of $\overset{\frown}{BAC}$

$\frac{200}{360} \cdot 2\pi(200)$

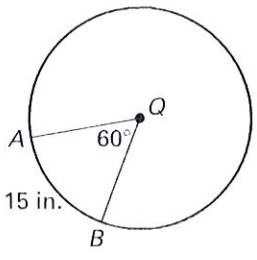
$\frac{40\pi}{9} = 14$

Find the indicated measure.

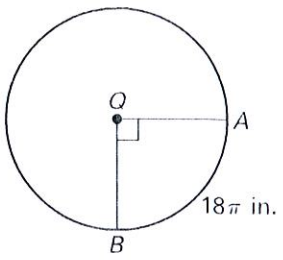
17. Length of $\overset{\frown}{AB}$



18. Circumference of ⊙*Q*



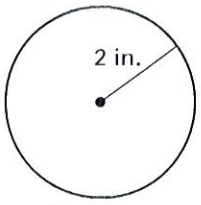
19. Radius of ⊙*Q*



Name _____ Date _____

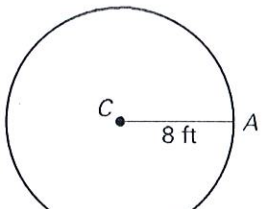
LESSON 6.8 Practice

Find the exact area of the circle. Then find the area of the circle to the nearest hundredth.

1. 

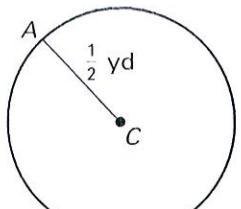
$\pi(2)^2$

$4\pi = 12.6$

2. 

$\pi(8)^2$

$64\pi = 201.1$

3. 

$\pi(\frac{1}{2})^2$

$\frac{\pi}{4} = 0.8$

Find the indicated measure.

4. The area of a circle is 58 square inches. Find the radius.

$58 = \pi r^2 \rightarrow 4.3$

5. The area of a circle is 37 square meters. Find the radius.

$37 = \pi r^2 \rightarrow 3.4$

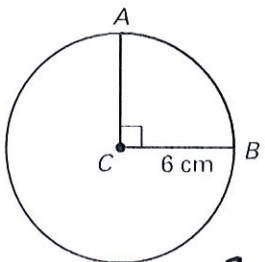
6. The area of a circle is 106 square centimeters. Find the diameter.

$106 = \pi r^2 \rightarrow r = 5.8 \rightarrow d = 11.6$

7. The area of a circle is 249 square feet. Find the diameter.

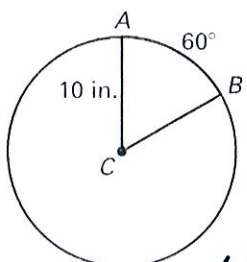
$249 = \pi r^2 \rightarrow r = 8.9 \rightarrow d = 17.8$

Find the areas of the sectors formed by $\angle ACB$.

8. 

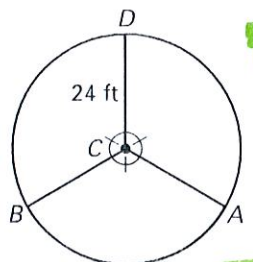
$\frac{90}{360} \cdot \pi(6)^2$

$9\pi = 28.3$

9. 

$\frac{60}{360} \cdot \pi(10)^2$

$\frac{50\pi}{3} = 52.4$

10. 

$\frac{360}{3} = 120$

$\frac{120}{360} \cdot \pi(24)^2$

$192\pi = 603.2$