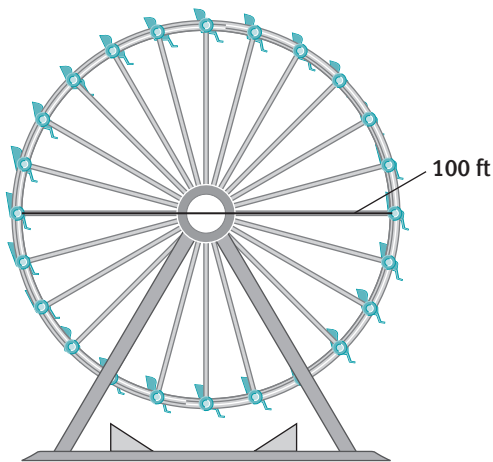


ACTIVITY 32 PRACTICE

Write your answers on notebook paper.
Show your work.

Lesson 32-1

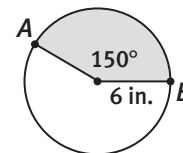
1. A circular ceramic plate has a circumference of 12π inches. What is the area of the plate?
2. What is the approximate largest circumference of a circular pond that could fit within a square walkway of sides 30 meters?
A. 47 m
B. 60 m
C. 94 m
D. 120 m
3. Levi boards a Ferris wheel with a diameter of 100 feet. What is the approximate distance, to the nearest foot, that Levi travels in six revolutions of the wheel?



4. A parallelogram has an area of 324 square feet. A circle has the same area. What is the approximate circumference of the circle?
A. 10.2 ft
B. 18.2 ft
C. 31.8 ft
D. 63.8 ft
5. Which of the following is equivalent to the ratio of the circumference to the radius of a circle?
A. $\frac{\pi}{2}$
B. $\frac{2}{\pi}$
C. 2π
D. 4π
6. The circumference of the thin metal band that protects the circular glass face of Dale's watch is 16π cm. What is the area of the glass face?

Lesson 32-2

Refer to the circle below for Items 7 and 8.



7. Determine the area of the shaded region.
8. Determine the length of minor \widehat{AB} .

9. The measure of the arc of a sector is 72° and the area of the sector is $5\pi \text{ in.}^2$. What is the radius of the circle?
- A. 5 in.
B. 9 in.
C. 10 in.
D. 25 in.
10. Is it possible for an arc with a central angle of 30° in one circle to have a greater arc length than an arc with a central angle of 150° in another circle? Justify your reasoning.
11. Find the area, to the nearest tenth, of one-quarter of a circular mirror with diameter 8 meters.
13. Circle S, with radius of 14 cm, is dilated using the scale factor 4 : 5. What is the radius of the new circle?
14. Which of the following is equivalent to 120° ?
- A. $\frac{1}{3}\pi$ radians
B. $\frac{2}{3}\pi$ radians
C. 2π radians
D. 3π radians
15. What degree measure is equivalent to $\frac{7\pi}{4}$ radians?

Lesson 32-3

12. Circle Q is located at $(-5, 2)$. It has a radius of 5 units. Circle O is located at $(5, 2)$. It has a radius of 2 units.
- a. Describe the sequence of transformations that maps circle Q onto circle O to prove that the circles are similar.
- b. Describe another sequence of transformations that can be used to prove the circles are similar.
16. If the area of a sector is one-tenth of the area of the circle, what is the central angle of the sector? Explain how you determined your answer.

MATHEMATICAL PRACTICES**Reason Abstractly and Quantitatively**