

# Challenge Problems

## 13.1

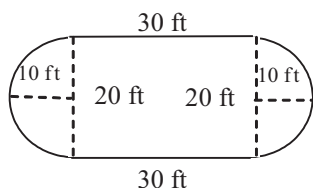
NAME \_\_\_\_\_

Module 13 Perimeter, Area, and Volume

Lesson 1 Perimeter and Circumference

### Set 1

- 1 What is the perimeter of the skating rink?



- 2 This Ferris wheel is 88 feet in diameter. If the Ferris wheel makes 15 revolutions during a ride, about how much distance is traveled?



## Possible Answers

### Set 1

1. Each of the ends of the rink is half a circle, or a semicircle, with a radius of 10 feet.

$$C = 2\pi r$$

$$C = 2(3.14)(10)$$

$$C = (3.14)(20) = 62.8 \text{ ft}$$

$$P \approx 62.8 + 30 + 30 \approx 122.8 \text{ ft}$$

2.  $C = \pi d$

$$C = (3.14)(88)$$

$$C \approx 276.32 \text{ ft} \approx 276 \text{ ft}$$

$$276 \times 15 = 4,140 \text{ ft}$$

The distance traveled is about 4,140 ft.