## **Lesson 5 Problem-Solving Practice**

## Polygons on the Coordinate Plane

Solve.

- 1. Mrs. Palmer is placing a retaining wall around a garden. The coordinates of the vertices of the garden are (1, 1), (1, 5), (6, 5), and (6,1). If each grid square has a length of 2 feet, find the perimeter of the garden.
- 2. Melinda is building a rectangular border around her bedroom window. The coordinates of the vertices of the border are (2, 3), (4, 3), (4, 7), and (2, 7). Each grid square has a length of 12 inches. Find the perimeter of the rectangle.

- **3.** David is spreading mulch on a triangular area of his flower bed. The coordinates of the vertices of the area are (1, 3), (9, 3), and (4, 6). What is the area of the triangle if each square has an area of 3 square feet?
- 4. The Clayton family's pool has vertices at the coordinates (0, 2), (0, 5), (2, 5), (2, 6), (5, 6), (5, 1), (2, 1), and (2, 2). If each grid square has an area of 9 square feet, what is the area of the pool?

- **5.** Janice is creating a scrapbook page with vertices (2, 1), (7, 1), (7, 7), and (2, 7). What is the area of the page she will be covering if each grid represents 4 square inches?
- **6.** Refer to Exercise 5. What is the perimeter of the page she is creating if each grid square has a length of 2 inches?