Lesson Summary

- The length of a line segment on the coordinate plane can be determined by finding the distance between its end points.
- You can find the perimeter and area of figures such as rectangles and right triangles by finding the lengths of the line segments that make up their sides and then using the appropriate formula.

Problem Set

1. One end point of a line segment is $(-3, -6)$. The length of the line segment is 7 units. Find four points that could serve as the other end point of the given line segment.

2. Two of the vertices of a rectangle are $(1, -6)$ and $(-8, -6)$. If the rectangle has a perimeter of 26 units, what are the coordinates of its other two vertices?

3. A rectangle has a perimeter of 28 units, an area of 48 square units, and sides that are either horizontal or vertical. If one vertex is the point $(-5, -7)$ and the origin is in the interior of the rectangle, find the vertex of the rectangle that is opposite $(-5, -7)$.