Lesson 19: Problem Solving and the Coordinate Plane

Problem Set

1. One end point of a line segment is $\left(-3,-6\right)$. 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 $\left(1,-6\right)$ and $\left(-8,-6\right)$. 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 $\left(-5,-7\right)$ and the origin is in the interior of the rectangle, find the vertex of the rectangle that is opposite $\left(-5,-7\right)$.