## Lesson 4.4C ~ Quadrilaterals on the Coordinate Plane

Name $\qquad$ Period $\qquad$ Date $\qquad$
Graph each set of points on a coordinate plane. Connect the points in the order given.
Connect the last point to the first.


## The Distance Formula

The distance $d$ between two points, $\left(x_{1}, y_{1}\right)$ and $\left(x_{2}, y_{2}\right)$ is found by:

$$
d=\sqrt{\left(x_{2}-x_{1}\right)^{2}+\left(y_{2}-y_{1}\right)^{2}}
$$

4. Find the area and perimeter of the figure in Exercise 1. Use the Distance Formula to find side lengths that are not horizontal or vertical. Round each side length to the nearest tenth.
5. Find the area and perimeter of the figure in Exercise 3. Use the Distance Formula to find side lengths that are not horizontal or vertical.
6. An isosceles trapezoid has legs that are equal in length. Three of the four vertices of an isosceles trapezoid are $(2,-2),(4,-5)$ and $(-5,-5)$.
a. What are the coordinates of the missing vertex?
b. What is the perimeter of the trapezoid? Round each side length to the nearest tenth.
