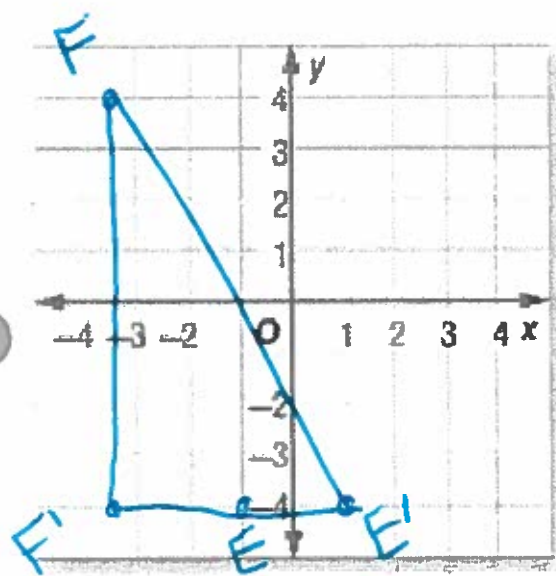**Vocabulary**

Steps:

1. Start at the origin.
2. The **x-coordinate** is the first coordinate (go right or left).
3. The **y-coordinate** is the second coordinate (go up or down).

Reflections

- Use the notation A' to label the reflection of a point A.
- You can graph points that are reflected across the x- and y-axes.
- Points **reflected across the x-axis** will have the same x-coordinates and their y-coordinates will be opposites.
- Points **reflected across the y-axis** will have the same y-coordinates and their x-coordinated will be opposites.

Guided Practice

Use a coordinate plane to represent Jasmine's stone garden. Graph points E (-1, -4) and F (-3 ½ , 4). Then, reflect point E across the y-axis and point F across the x-axis. What is the shape of her stone garden?

triangle

What is the distance between Point E and Point F'?

2 ½ units

Partner Talk

What are the coordinates of Y' after Y (-3.5, 5) is reflected across the **x-axis**?

(-3.5, -5)

Building on the Essential Question – How can the coordinate plane be used to represent geometric figures?

After you plot and connect the points, they can create shapes.

Rate yourself

How confident are you about graphing on the coordinate plane? Check the box that applies.

← Rate yourself!