Name_____ Date_____

Extra Practice

In Exercises 1–3, graph the polygon with the given vertices and its image after the similarity transformation.

1. $A(3, 6), B(2, 5), C(4, 3), D(5, 5)$
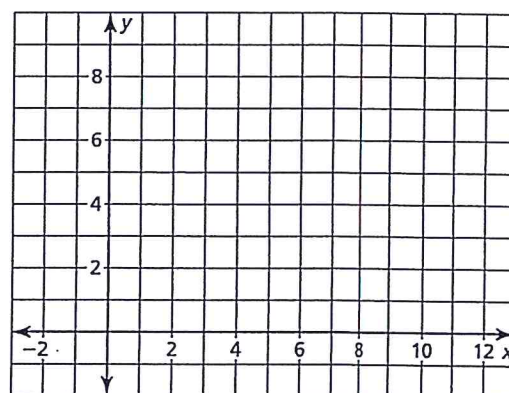
   Translation: $(x, y) \rightarrow (x - 5, y - 3)$

   Dilation: $(x, y) \rightarrow (3x, 3y)$
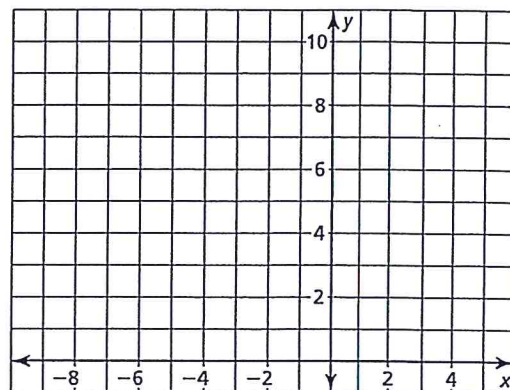
2. $R(12, 8), S(8, 0), T(0, 4)$

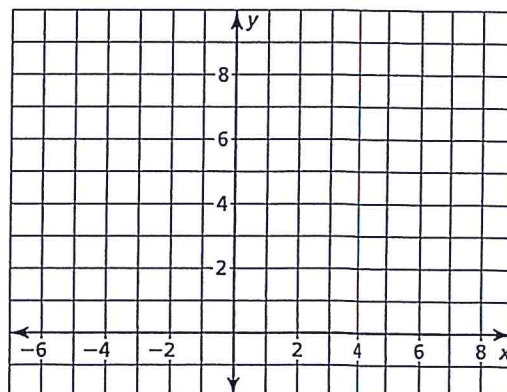   **Dilation:** $(x, y) \rightarrow \left(\frac{1}{4}x, \frac{1}{4}y\right)$

   Reflection: in the y-axis

3. $X(9, 6), Y(3, 3), Z(3, 6)$

   Rotation: 90° about the origin

   Dilation: $(x, y) \rightarrow \left(\frac{2}{3}x, \frac{2}{3}y\right)$

8.2 Notetaking with Vocabulary (continued)

In Exercises 4–6, describe the similarity transformation that maps the preimage to the image.

4.

5.

6.