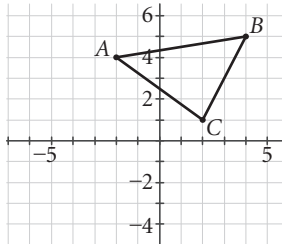


Coordinate Geometry 2 • Coordinate Properties of Transformations

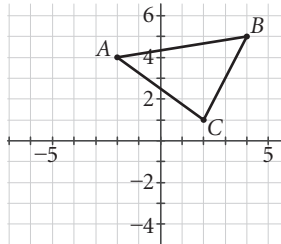
Name _____ Period _____ Date _____

For Exercises 1–3, translate each quadrilateral by the given vector.

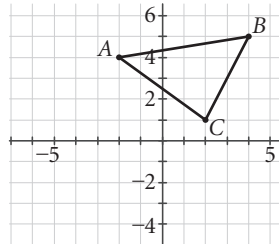
1. $\langle 1, -5 \rangle$



2. $\langle 0, -2 \rangle$

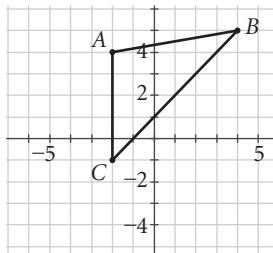


3. $\langle -3, -1 \rangle$

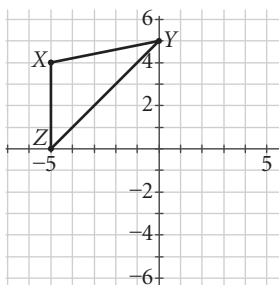


For Exercises 4–6, transform each polygon by the given ordered pair rule. Identify either the line of reflection or the center of rotation.

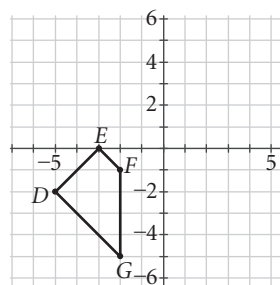
4. $(x, y) \rightarrow (-x, y)$



5. $(x, y) \rightarrow (y, x)$

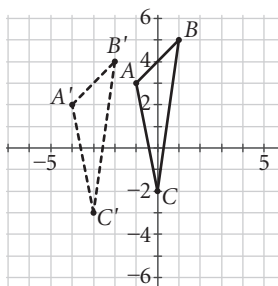


6. $(x, y) \rightarrow (-x, -y)$

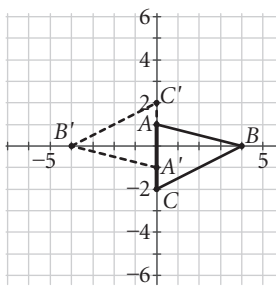


For Exercises 8–9, describe the type of transformation. Find the ordered pair rule that transformed $\triangle ABC$ onto its image $\triangle A'B'C'$.

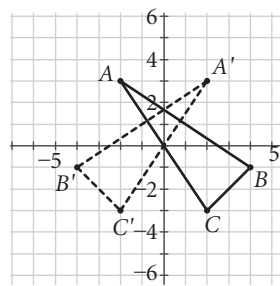
7. $(x, y) \rightarrow (____, ____)$



8. $(x, y) \rightarrow (____, ____)$



9. $(x, y) \rightarrow (____, ____)$



10. Given $\triangle QRS$ with vertices $Q(1, 3)$, $R(0, -2)$, and $S(-3, -1)$. Transform $\triangle QRS$ by the ordered pair rule $(x, y) \rightarrow (x + 2, y - 3)$. What are the coordinates of the vertices of $\triangle Q'R'S'$? Why type of transformation is that? What ordered pair rule transforms $\triangle Q'R'S'$ to $\triangle QRS$?