

Reteaching 9-8 Translations

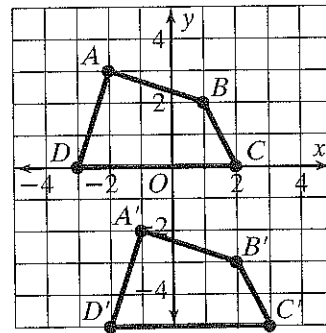
Write a rule to describe the translation.

Point A has coordinates $(-2, 3)$. Its image A' has coordinates $(-1, -2)$. To move from A to A' on the graph, we go right one unit $(+1)$ and down 5 units (-5) . So the rule is

$(x, y) \rightarrow (x + 1, y - 5)$. We could also subtract coordinates:

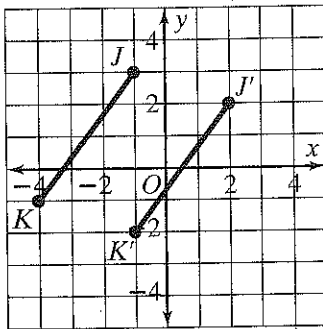
$$x: -1 - (-2) = -1 + 2 = 1$$

$$y: -2 - 3 = -2 + (-3) = -5$$

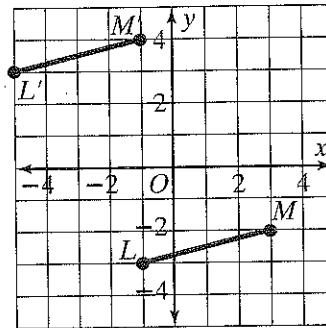


Write a rule to describe each translation.

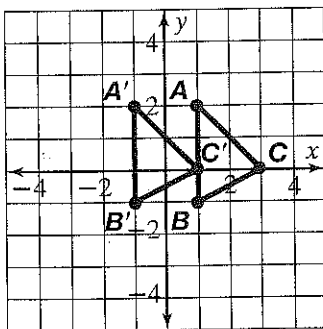
1. $(x, y) \rightarrow$ _____



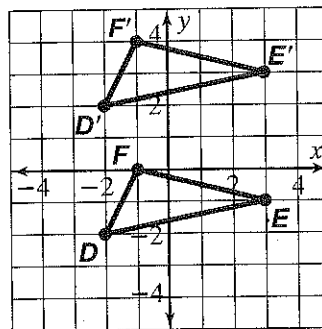
2. $(x, y) \rightarrow$ _____



3. $(x, y) \rightarrow$ _____



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



5. The translation that takes $A(8, -6)$ to $A'(9, -3)$

$$(x, y) \rightarrow$$

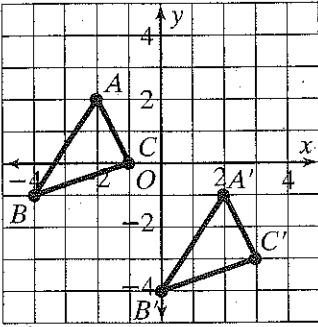
6. The translation that takes $B(2, -10)$ to $B'(-7, -12)$

$$(x, y) \rightarrow$$

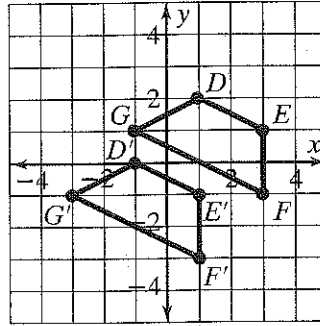
Practice 9-8 Translations

Write a rule to describe each translation.

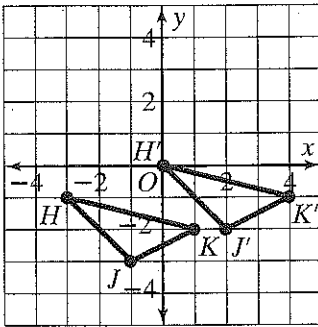
1. $(x, y) \rightarrow$ _____



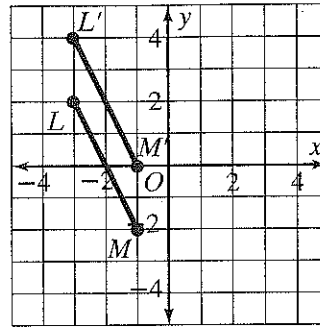
2. $(x, y) \rightarrow$ _____



3. $(x, y) \rightarrow$ _____

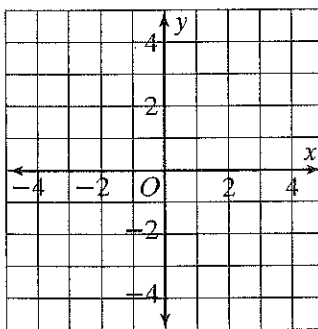


4. $(x, y) \rightarrow$ _____

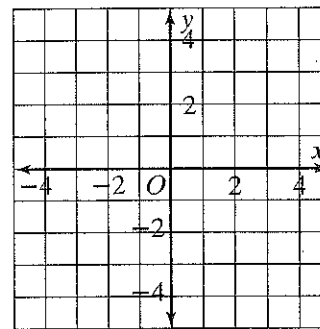


The vertices of a triangle and a translation are given. Graph each triangle and its image.

5. $G(-4, 4), H(-2, 3), J(-3, 0)$; right 5 and down 2



6. $K(0, -1), L(4, 2), M(3, -3)$; left 4 units and up 3 units



A point and its image after a translation are given. Write a rule to describe the translation.

7. $A(9, -4), A'(2, -1)$ $(x, y) \rightarrow$ _____

8. $B(-3, 5), B'(-5, -3)$ $(x, y) \rightarrow$ _____