Does the transformation appear to be a rigid motion?

1.

Image

Preimage

2.

Preimage   Image

3.
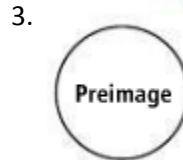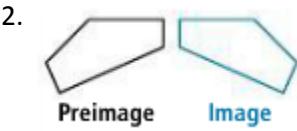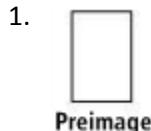
Preimage

Image

Graph the image of each figure under the given translation.

4. $T_{\langle 3,2 \rangle}(\Delta ABC)$

5. $T_{\langle 5,-1 \rangle}(PQRS)$

6. $T_{\langle -2,5 \rangle}(WXYZ)$

A'_____ B'_____ C'_____
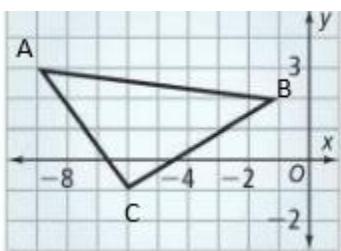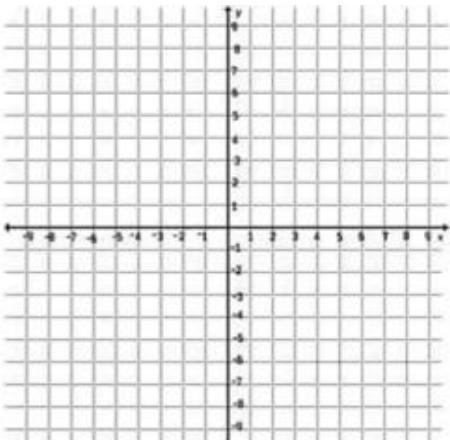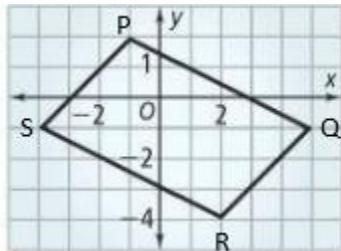
P'_____ Q'_____ R'_____ S'_____
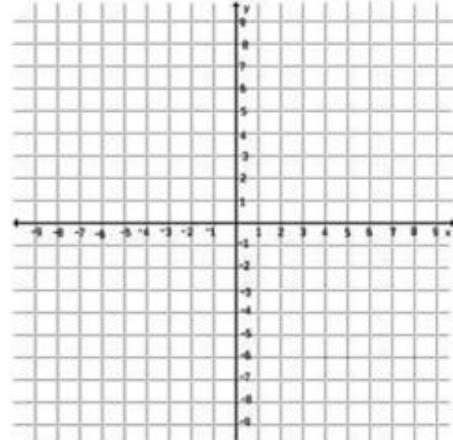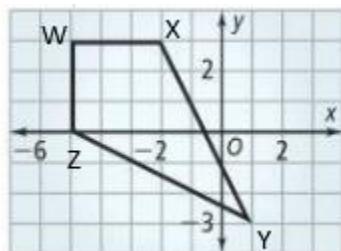
W'_____ X'_____ Y'_____ Z'_____
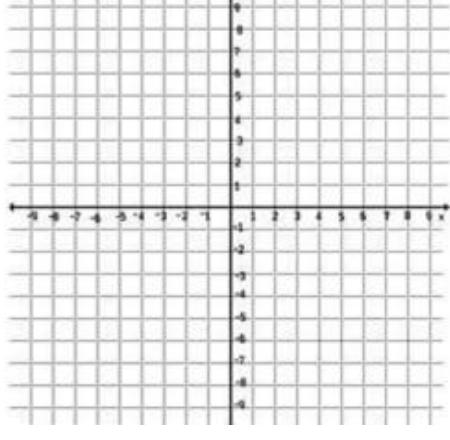
Write the rule for the transformation shown.

7.

Rule_____

8.
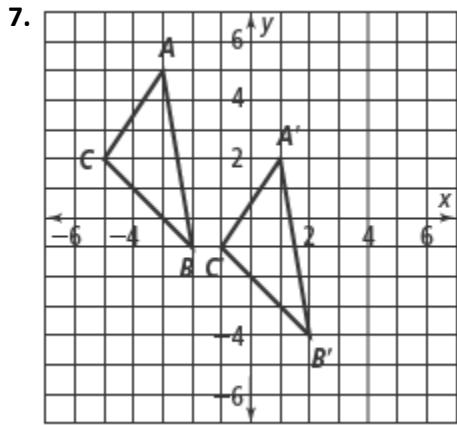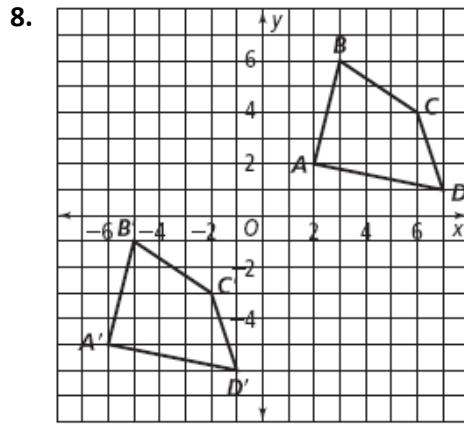
Rule_____

9. ΔMUG has coordinates M(2, -4), U(6, 6) and G(7, 2). The translation $T_{\langle -5,2 \rangle}(\Delta MUG = \Delta M'U'G)$. What are the coordinates of M', U', and G'?

10. ΔXYZ has coordinates X(2, 3), Y(1, 4), and Z(8, 9). A translation maps X to X'(4, 7). What are the coordinates for Y' and Z' for this translation?

Standardized Test Prep:

11. $\triangle ABC$ has vertices $A(-5, 2)$, $B(0, -4)$, and $C(3, 3)$. What are the vertices of the image of $\triangle ABC$ after the translation $T_{\langle 7, -5 \rangle}(\triangle ABC)$?

Ⓐ $A'(2, -3)$, $B'(7, -9)$, $C'(10, -2)$ Ⓒ $A'(-12, 7)$, $B'(-7, 1)$, $C'(-4, 8)$

Ⓑ $A'(-12, -3)$, $B'(-7, -9)$, $C'(-4, -2)$ Ⓓ $A'(2, -3)$, $B'(10, -2)$, $C'(7, -9)$