

Name: Key

Date: \_\_\_\_\_

**Practice**

1. Translate the image by  $(x + 4, y - 6)$

$A(-2, 4) \rightarrow A' (2, -2)$

$B(0, -8) \rightarrow B' (4, -14)$

$C(-3, 5) \rightarrow C' (1, -1)$

2. Translate the image by  $(x - 1, y + 5)$

$D(1, 2) \rightarrow D' (0, 7)$

$E(-3, -5) \rightarrow E' (-4, 0)$

$F(4, -1) \rightarrow F' (3, 4)$

3. Find the pre-image  $(x - 9, y + 13)$

$G(14, -42) \rightarrow G'(5, -29)$

$H(29, -32) \rightarrow H'(20, -19)$

$I(32, -17) \rightarrow I'(21, -4)$

4. Find the pre-image  $(x + 7, y - 19)$

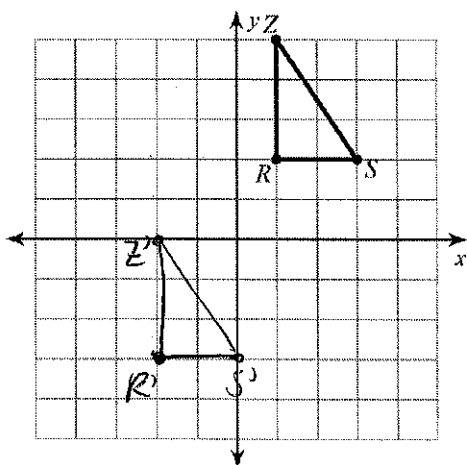
$G(-5, 37) \rightarrow G'(2, 18)$

$H(6, 48) \rightarrow H'(13, 29)$

$I(17, 56) \rightarrow I'(24, 37)$

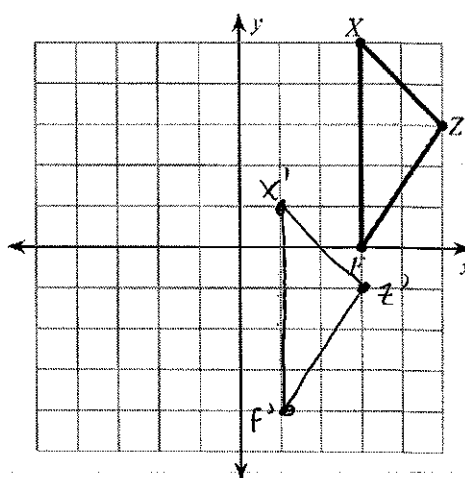
5. Translate the image.

translation:  $(x, y) \rightarrow (x - 3, y - 5)$

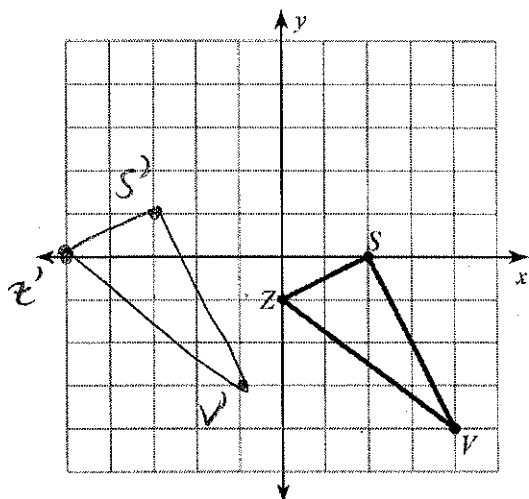


6. Translate the image.

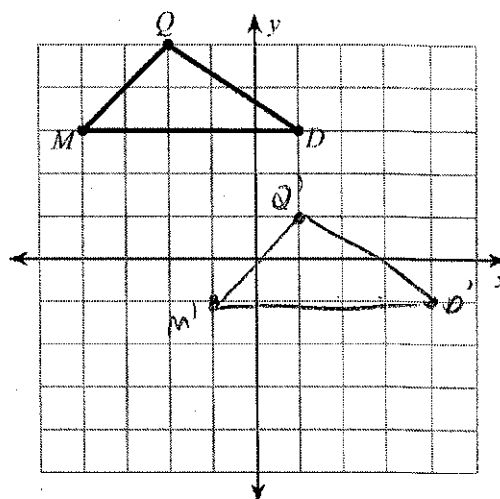
translation:  $(x, y) \rightarrow (x - 2, y - 4)$



7. Translate the image.  
translation:  $(x, y) \rightarrow (x - 5, y + 1)$

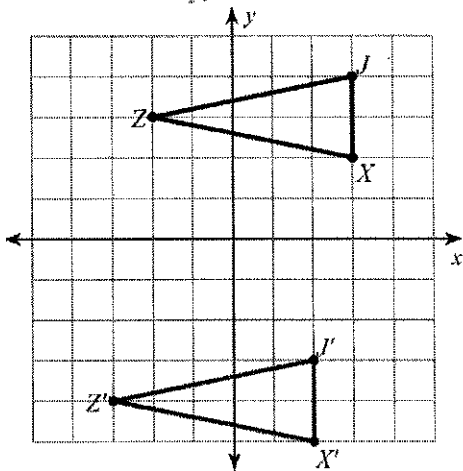


8. Translate the image.  
translation:  $(x, y) \rightarrow (x + 3, y - 4)$

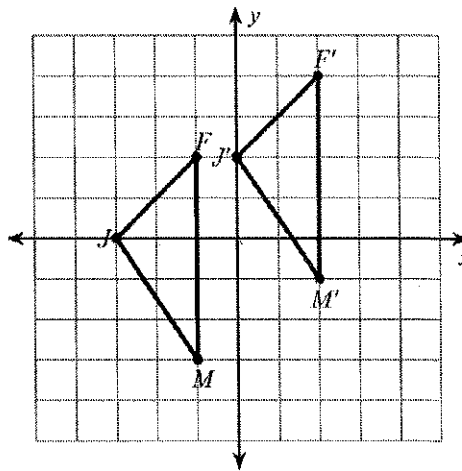


Write a rule for the given translation.

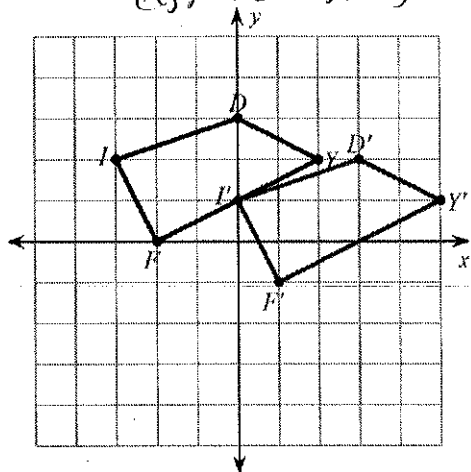
9.  $(x, y) \rightarrow (x - 1, y - 7)$



10.  $(x, y) \rightarrow (x + 3, y + 2)$



11.  $(x, y) \rightarrow (x + 3, y - 1)$



12.  $(x, y) \rightarrow (x - 5, y + 2)$

