

7.2 Practice Transformation Problems

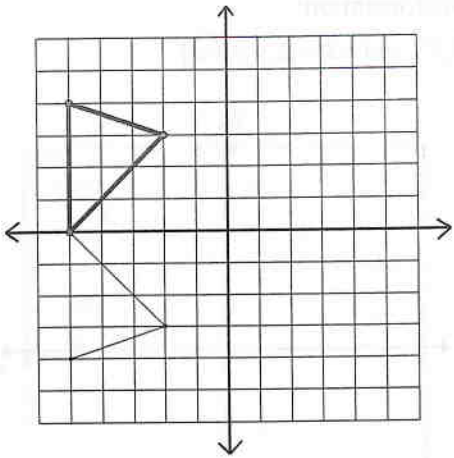
Name: _____

Complete the ordered pair rule that transforms the thin polygon to the thick polygon.

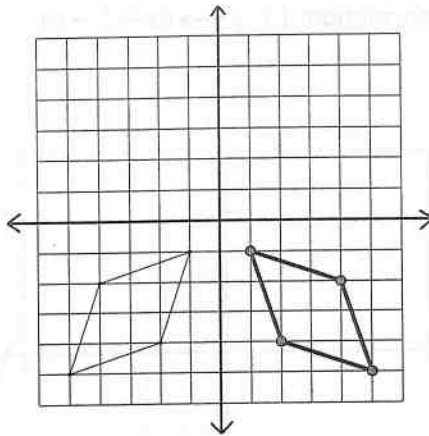
1. $(x, y) \rightarrow (\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

2. $(x, y) \rightarrow (\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

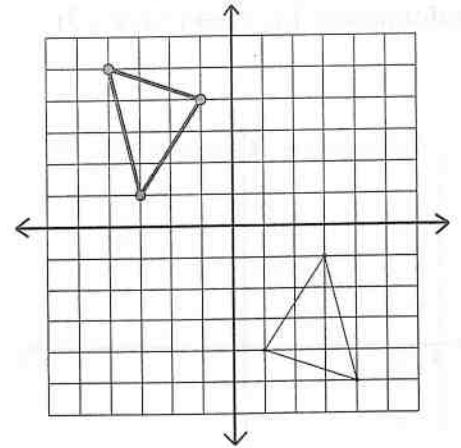
3. $(x, y) \rightarrow (\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$



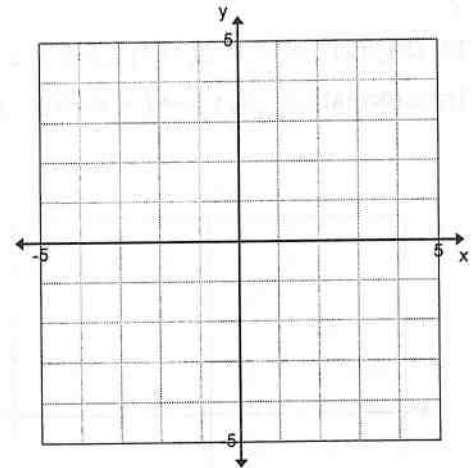
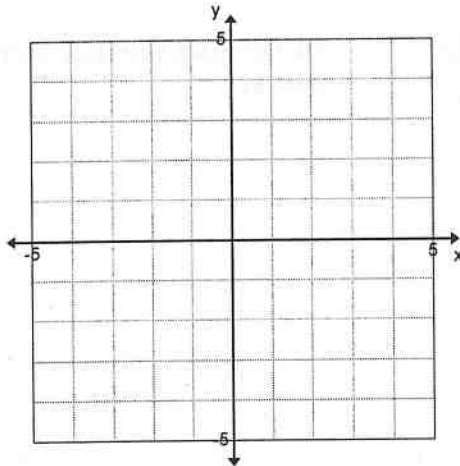
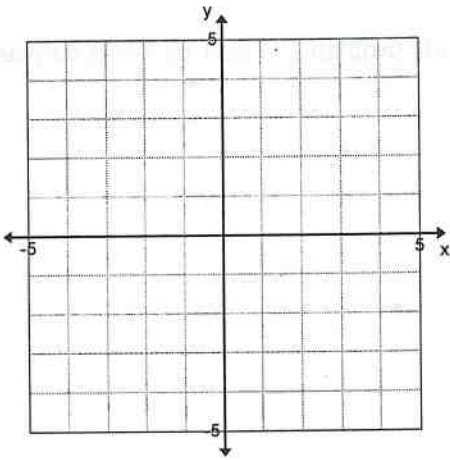
4. Original: $A(-3, -1) B(-1, 0) C(0, -2)$
Transformation: $(x, y) \rightarrow (-x, y)$



5. Original: $A(-3, -1) B(-1, 0) C(0, -2)$
Transformation: $(x, y) \rightarrow (x, -y)$



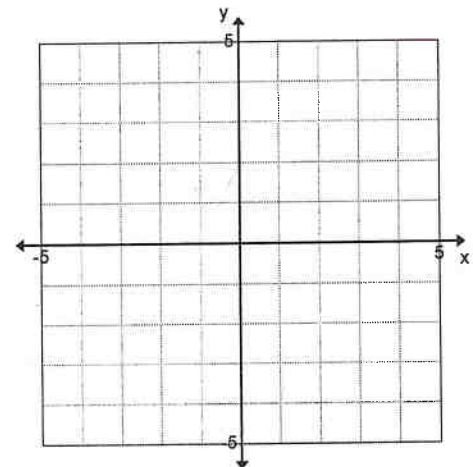
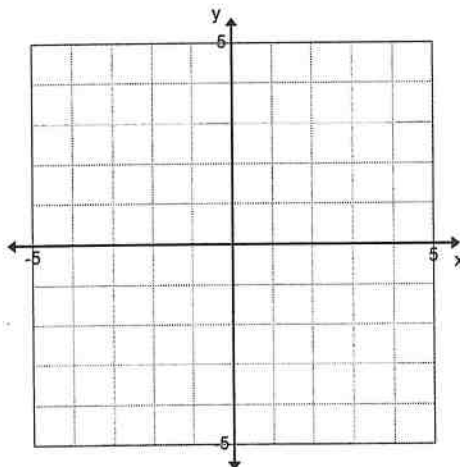
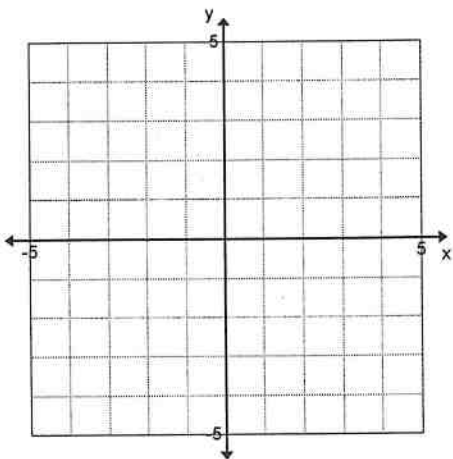
6. Original: $A(-3, -1) B(-1, 0) C(0, -2)$
Transformation: $(x, y) \rightarrow (-x, -y)$



7. Original:
 $A(-2, 1) B(1, 1) C(1, -1) D(-1, -2)$
Transformation: $(x, y) \rightarrow (-x, y)$

8. Original:
 $A(-2, 1) B(1, 1) C(1, -1) D(-1, -2)$
Transformation: $(x, y) \rightarrow (x, -y)$

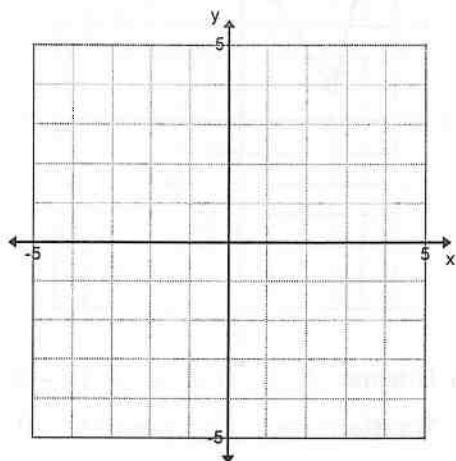
9. Original:
 $A(-2, 1) B(1, 1) C(1, -1) D(-1, -2)$
Transformation: $(x, y) \rightarrow (-x, -y)$



10. Original:

$A(-4,1)$ $B(-1,1)$ $C(-1,3)$ $D(-3,3)$

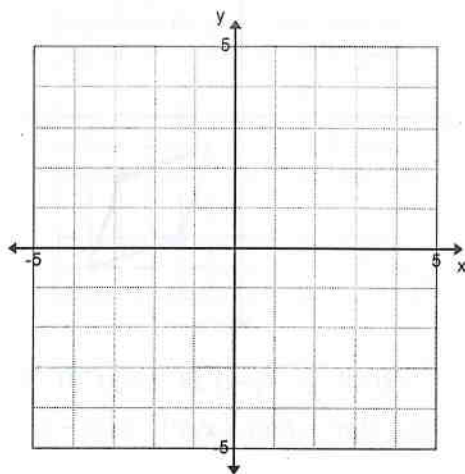
Transformation: $(x, y) \rightarrow (-x, y - 3)$



11. Original:

$A(-4,1)$ $B(-1,1)$ $C(-1,3)$ $D(-3,3)$

Transformation: $(x, y) \rightarrow (x + 2, -y)$

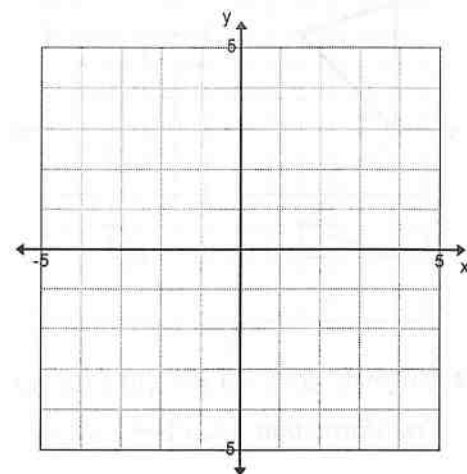


12. Original:

$A(-4,1)$ $B(-1,1)$ $C(-1,3)$ $D(-3,3)$

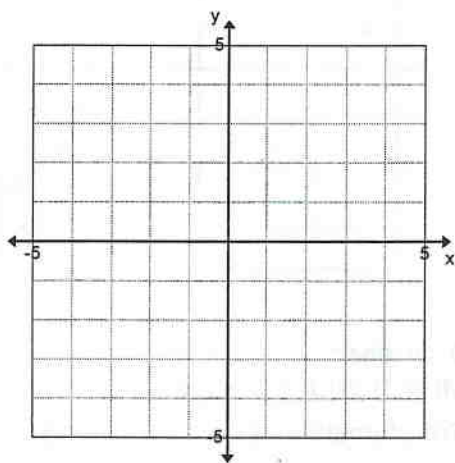
Transformation:

$(x, y) \rightarrow (-x - 2, -y + 3)$



13. Original: $A(-4,1)$ $B(-1,1)$ $C(-1,3)$ $D(-3,3)$

Transformation: $(x, y) \rightarrow -(x + 2), -y + 3)$



14. Compare your transformations in problems 12 and 13. What do you notice?