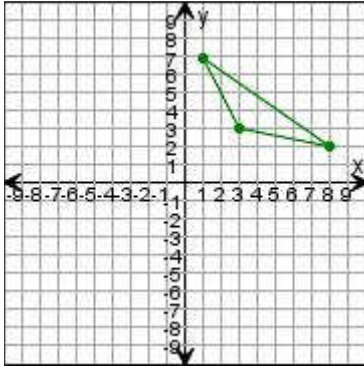


Translation and Reflection Homework

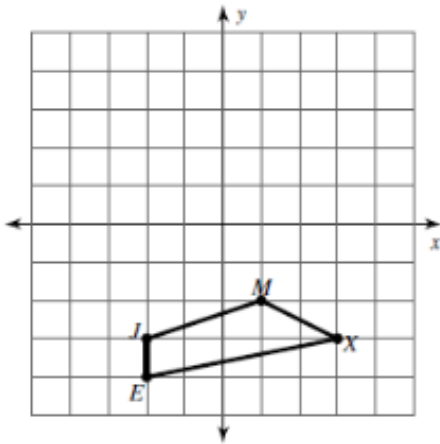
Name _____ Hr _____

1. Translate the triangle left 4 units, then 5 units down. **Write the coordinates of the new figure.**



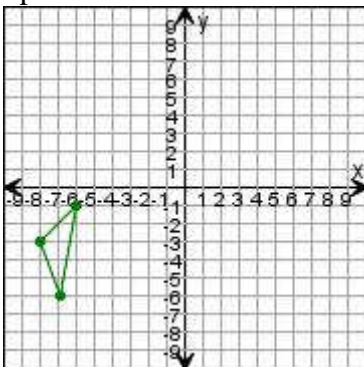
Write a rule for the translation $(x, y) \rightarrow (\quad , \quad)$

2. Translate the figure up 5 units, then 2 units right. **Write the coordinates of E'J'M'X'.**



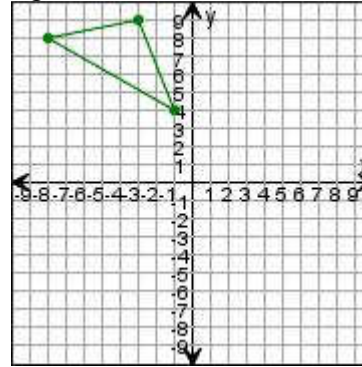
Write a rule for the translation $(x, y) \rightarrow (\quad , \quad)$

3. Translate the triangle right 1 unit, then 4 units up. **Write the coordinates of the image.**



Write a rule for the translation $(x, y) \rightarrow (\quad , \quad)$

4. Translate the triangle down 5 units, then 2 units right. Write the coordinates of the new figure.



Write a rule for the translation $(x, y) \rightarrow (\quad , \quad)$

5. Write the coordinates of each ordered pair after the transformation.

a) translated up 2 units, left 1 unit.

$$A(4, 2) \longrightarrow (\quad , \quad)$$

b) translated down 3 units, right 2 units.

$$B(5, -7) \longrightarrow (\quad , \quad)$$

c) translated up 4 units, right 1 unit.

$$C(-3, -2) \longrightarrow (\quad , \quad)$$

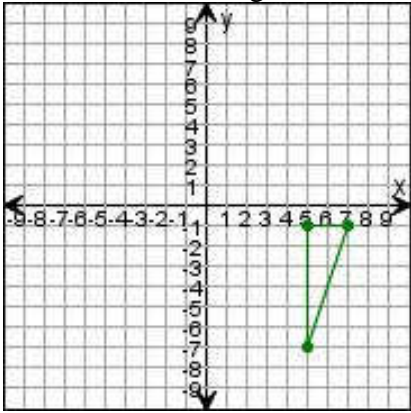
6. Describe the transformation that occurred between the image and pre-image.

a) $A(4, 2) \longrightarrow A'(4, 0)$

b) $B(5, -7) \longrightarrow B'(7, -5)$

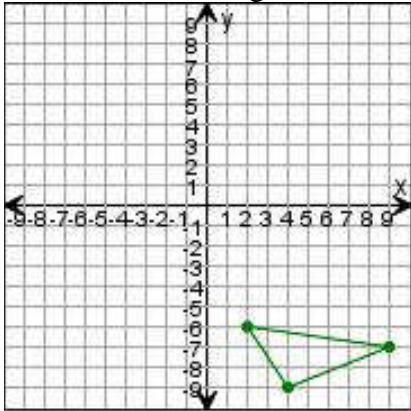
c) $C(-3, -2) \longrightarrow C'(-6, 1)$

7. Reflect the triangle over the x-axis.



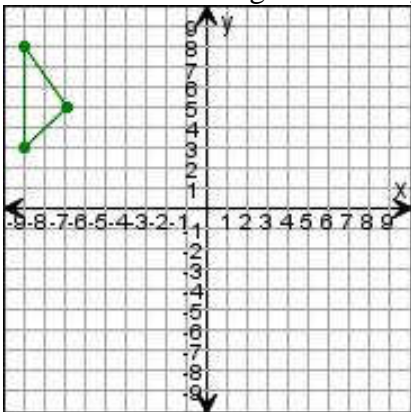
Write a rule for the translation $(x, y) \rightarrow (\quad , \quad)$

8. Reflect the triangle over the x-axis.



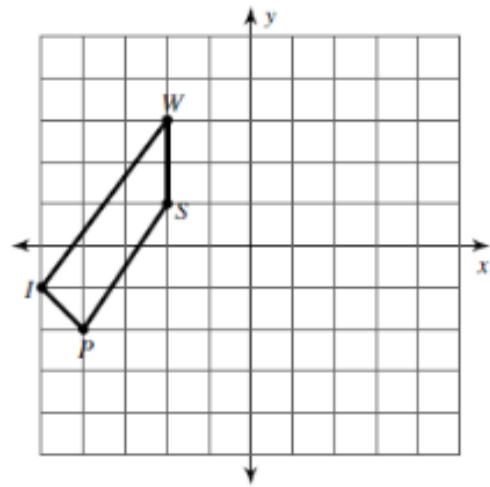
Write a rule for the translation $(x, y) \rightarrow (\quad , \quad)$

9. Reflect the triangle over the y-axis.



Write a rule for the translation $(x, y) \rightarrow (\quad , \quad)$

10. Reflect the figure over the y-axis.



11. Write the new coordinates if each were to be reflected over the x-axis.

a) $(4, 2) \longrightarrow$

b) $(5, -7) \longrightarrow$

c) $(-3, -2) \longrightarrow$

12. Write the new coordinates if each were to be reflected over the y-axis.

a) $(4, 2) \longrightarrow$

b) $(5, -7) \longrightarrow$

c) $(-3, -2) \longrightarrow$