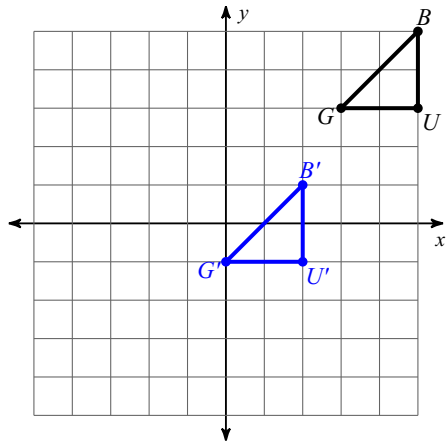


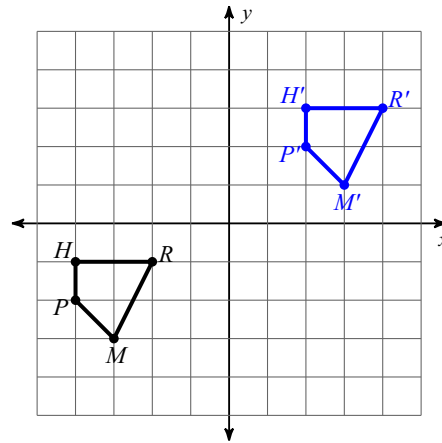
Lesson 1.7

Write a rule to describe each transformation.

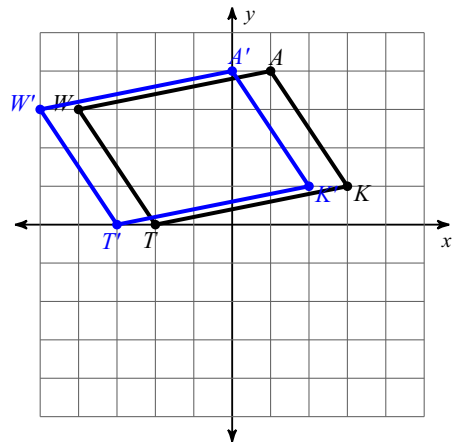
1)



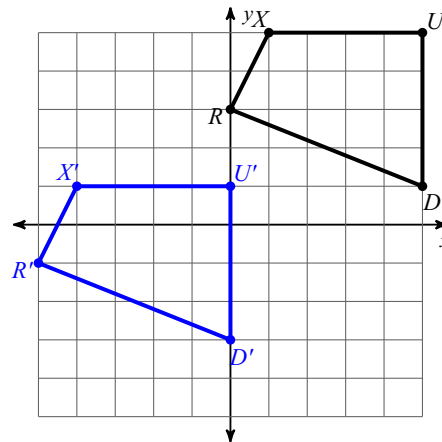
2)



3)



4)



Find the coordinates of the vertices of each figure after the given transformation.

5) translation: $(x, y) \rightarrow (x - 4, y + 8)$
 $Y(4, -5), W(5, -3), L(5, -5)$

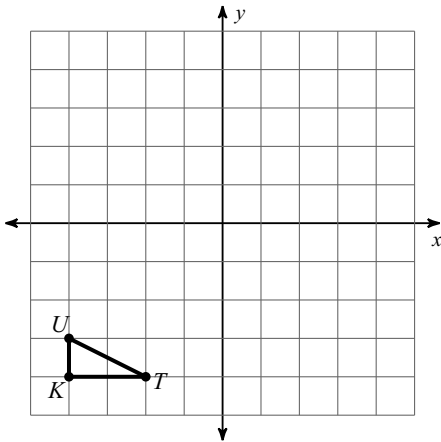
6) translation: $(x, y) \rightarrow (x - 4, y - 9)$
 $I(1, 4), L(1, 5), B(3, 5), M(3, 4)$

7) translation: $(x, y) \rightarrow (x - 1, y - 1)$
 $Y(-4, 2), V(-4, 5), G(-1, 4), Q(-1, -1)$

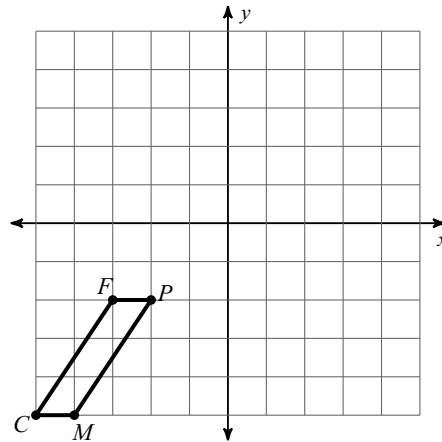
8) translation: $(x, y) \rightarrow (x - 3, y - 3)$
 $V(0, -1), M(0, 3), S(2, 4), K(4, -1)$

Graph the image of the figure using the transformation given.

9) reflection across the y-axis

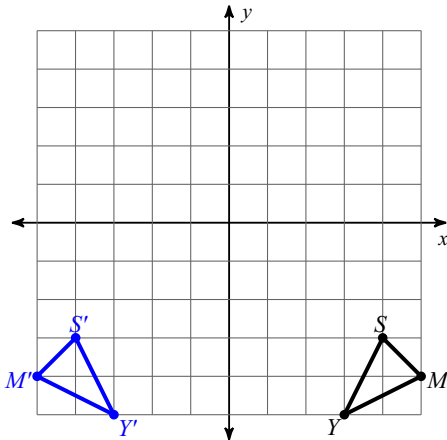


10) reflection across the x-axis



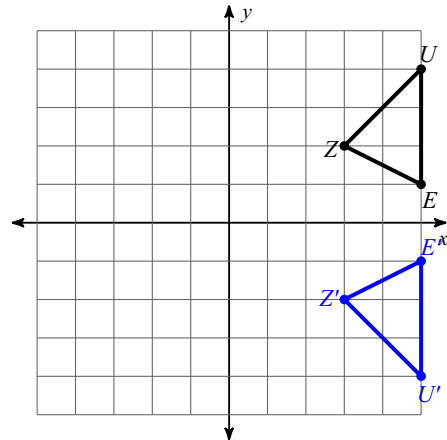
Write a rule to describe each transformation.

11)



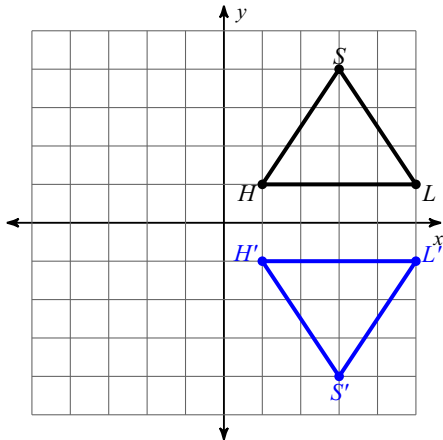
- A) reflection across the x-axis
- B) reflection across the y-axis
- C) translation: 6 units left and 6 units up
- D) translation: 5 units left and 2 units up

12)



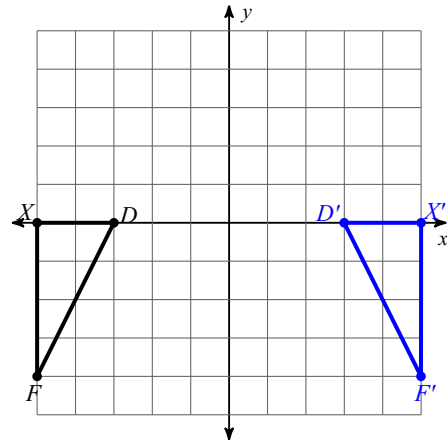
- A) reflection across the y-axis
- B) reflection across the x-axis
- C) translation: 4 units down
- D) rotation 180° about the origin

13)



- A) rotation 90° counterclockwise about the origin
- B) translation: 4 units left
- C) reflection across the x-axis
- D) reflection across the y-axis

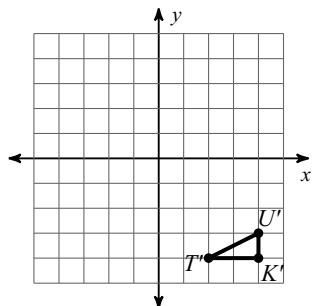
14)



- A) reflection across the y-axis
- B) translation: 2 units up
- C) rotation 90° counterclockwise about the origin
- D) reflection across the x-axis

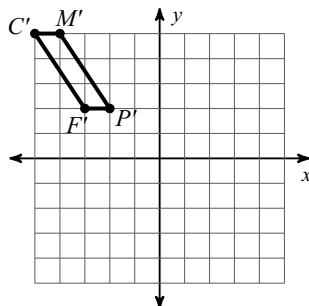
Answers to Lesson 1.7 (ID: 1)

- 1) translation: $(x, y) \rightarrow (x - 3, y - 4)$ 2) translation: $(x, y) \rightarrow (x + 6, y + 4)$
 3) translation: $(x, y) \rightarrow (x - 1, y)$ 4) translation: $(x, y) \rightarrow (x - 5, y - 4)$
 5) $Y(0, 3), W(1, 5), L(1, 3)$ 6) $I(-3, -5), L(-3, -4), B(-1, -4), M(-1, -5)$
 7) $Y(-5, 1), V(-5, 4), G(-2, 3), Q(-2, -2)$ 8) $V(-3, -4), M(-3, 0), S(-1, 1), K(1, -4)$
 9) 10) 11) B



12) B

13) C



14) A