

Test, Form 1A (continued)

$(x, y) \rightarrow (4x, 4y)$

7. Triangle JKL has vertices $J(0, 2)$, $K(-1, 2)$, and $L(0, -3)$. What are the coordinates of the image of point K after a dilation with a scale factor of 4?

$J'(0, 8)$ $L'(-4, -12)$
 $K'(-4, 8)$

7. $J'(0, 8)$
 $K'(-4, 8)$
 $L'(-4, -12)$

8. Triangle XYZ has vertices $X(-4, 3)$, $Y(-1, 2)$, and $Z(-2, 0)$. What are the coordinates of the image of XYZ after a translation of 3 units to the right and 1 unit up?

$(x, y) \rightarrow (x+3, y+1)$

8. $X'(-1, 4)$
 $Y'(2, 3)$
 $Z'(1, 1)$

9. Quadrilateral $ABCD$ has vertices $A(-1, 3)$, $B(-1, 0)$, $C(4, 0)$, and $D(4, 3)$. What are the coordinates of the image of point A after a reflection across the y -axis?

$(x, y) \rightarrow (-x, y)$

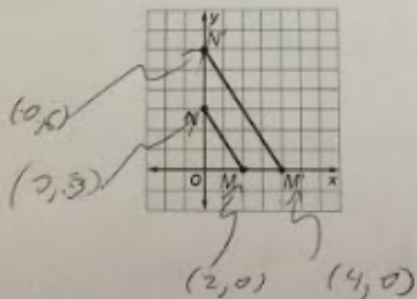
9. $A'(1, 3)$
 $B'(1, 0)$
 $C'(4, 0)$
 $D'(-4, 3)$

10. Triangle MNP has vertices $M(5, 4)$, $N(5, 9)$, and $P(-1, 4)$. What are the coordinates of the image of point P after the triangle is rotated 180° clockwise about the origin?

$(x, y) \rightarrow (-x, -y)$

10. $M'(-5, -4)$
 $N'(-5, -9)$
 $P'(1, -4)$

11. The graph shows segment $M'N'$ is a dilation of segment MN . What is the scale factor of the dilation?

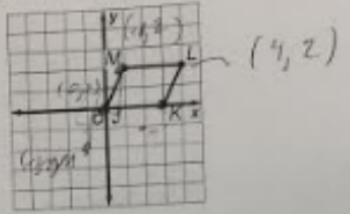


11. 2

Chapter 6 Practice Test

Write the letter for the correct answer in the blank at the right of each question.

For Exercises 1-6, parallelogram $JKLM$ has vertices as shown.



1. If the figure is translated 4 units left, what are the coordinates of J' ?

$$(x, y) \rightarrow (x-4, y)$$

1. $J'(-4, 0)$

2. If the figure is translated 2 units left and 4 units down, what are the coordinates of L' ?

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

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

2. $L'(2, -2)$

3. If the figure is rotated 90° clockwise about the origin, what are the coordinates of M' ?

$$(x, y) \rightarrow (y, -x)$$

$$M(1, 2) \rightarrow M'(2, -1)$$

3. $M'(2, -1)$

4. If the figure is reflected over the x -axis, what are the coordinates of K' ?

$$(x, y) \rightarrow (x, -y)$$

$$K(3, 0) \rightarrow K'(3, 0)$$

4. $K'(3, 0)$

5. If the figure is dilated using a scale factor of $\frac{1}{2}$, what are the coordinates of L' ?

$$(x, y) \rightarrow (\frac{1}{2}x, \frac{1}{2}y)$$

$$L(4, 2) \rightarrow L'(2, 1)$$

5. $L'(2, 1)$

6. If the figure is reflected over the y -axis, what are the coordinates of M' ?

$$(x, y) \rightarrow (-x, y)$$

$$M(1, 2) \rightarrow M'(-1, 2)$$

6. $M'(-1, 2)$