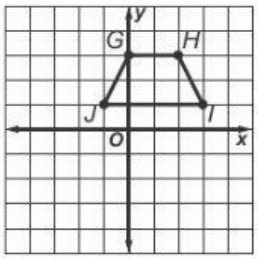
NAME _____ DATE _____ PERIOD _____

Test, Form 2A

SCORE _____

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

For Exercises 1-4, trapezoid *GHIJ* has vertices as shown.



1. If the figure is translated 3 units left and 4 units down, what are the coordinates of G'?

A. $(-1, -3)$ **C.** $(-3, 1)$

B. $(-3, -1)$ **D.** $(1, -3)$ **1.** _____

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

F. $(-3, 2)$ **H.** $(2, -3)$

G. $(3, -2)$ **I.** $(-3, -2)$ **2.** _____

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

A. $(3, 1)$ **C.** $(-3, -1)$

B. $(3, -1)$ **D.** $(-3, 1)$ **3.** _____

4. After a transformation, the coordinates of J' are $(0, -1)$. Which of the following best represents the transformation?

F. a reflection over the y-axis

G. a translation of 1 unit right and 2 units down

H. a 90° clockwise rotation about the origin

I. a dilation with a scale factor of 2 **4.** _____

5. The ordered pair $R(-2, 7)$ is translated 5 units to the right and down 2 units. Which of the following describes the translation using translation notation?

A. $(x - 2, y + 5)$ **C.** $(x - 5, y + 2)$

B. $(x + 2, y - 5)$ **D.** $(x + 5, y - 2)$ **5.** _____

6. Which type of transformation enlarges or reduces a figure?

F. dilation **H.** rotation

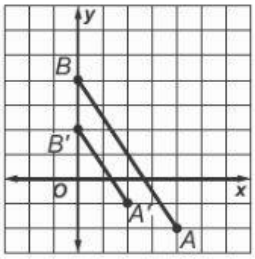
G. reflection **I.** translation **6.** _____

NAME _____ DATE _____ PERIOD _____

Test, Form 2A *(continued)*

SCORE _____

For Exercises 7 and 8, segment $A'B'$ is a dilation of segment AB.



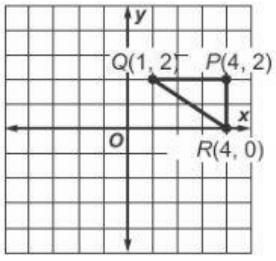
7. What is the scale factor of the dilation? **7.** _____

8. Classify the dilation as an enlargement or a reduction. **8.** _____

9. Triangle FGH has vertices $F(3, -1)$, $G(5, -1)$, and $H(5, 2)$. What are the coordinates of the image of point H after a translation 1 unit to the right and 3 units down? **9.** _____

10. Quadrilateral $JKLM$ has vertices $J(-4, 4)$, $K(-4, 1)$, $L(1, 1)$, and $M(1, 4)$. What are the coordinates of the image of point K after a reflection across the x-axis? **10.** _____

11. What are the coordinates of the image of point P after $\triangle PQR$ is rotated 90° counterclockwise about point Q?



11. _____

12. Triangle ABC has vertices $A(0, 4)$, $B(-1, 4)$, and $C(0, -3)$. What are the coordinates of the image of point A after a dilation with a scale factor of 2? **12.** _____