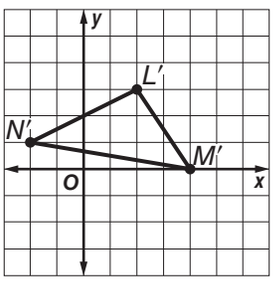
NAME _____ DATE _____ PERIOD _____

Test, Form 3A

SCORE _____

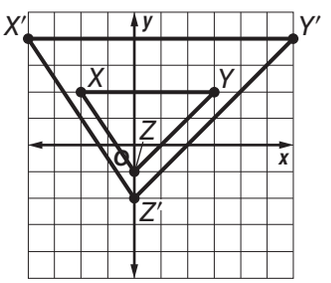
Write the correct answer in the blank at the right of each question.

1. The triangle $N'L'M'$ shown was reflected over the x-axis. Find the original coordinates of the triangle NLM.



1. $N(-2, -1)$, $L(2, -3)$, $M(4, 0)$

2. In the figure at the right, $\triangle X'Y'Z'$ is a dilation of $\triangle XYZ$. Find the scale factor of the dilation, and classify it as an enlargement or a reduction.



2. 2, enlargement

For Exercises 3 and 4, triangle PQR is rotated 90° clockwise about the origin. The vertices of the triangle are $P(3, 1)$, $Q(1, 4)$, and $R(2, -5)$.

3. Find the coordinates of P', Q', and R'.

3. $P'(1, -3)$, $Q'(4, -1)$, $R'(-5, -2)$

4. What is true about triangles PQR and $P'Q'R'$?

4. They are the same shape and size.

5. The point $M'(4, -5)$ is the result of a translation of 4 units left and 2 units up. Use translation notation to describe the translation.

5. $(x - 4, y + 2)$

NAME _____ DATE _____ PERIOD _____

Test, Form 3A *(continued)*

SCORE _____

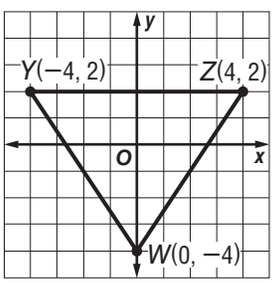
6. What are the coordinates of the image of $A(2, 5)$ after it is rotated 180° clockwise about the origin?

6. (−2, −5)

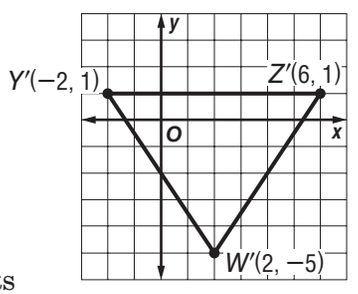
7. A projector transforms the image on a computer screen so that it is dilated by a scale factor of $\frac{7}{2}$. If the original image on the screen is 10 inches wide, find the new width after it is projected on the wall.

7. 35 in.

For Exercises 8–10, refer to the graph of $\triangle YZW$ at the right.

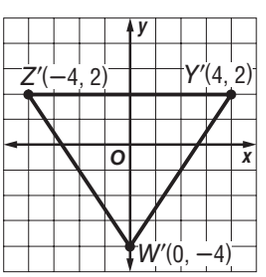


8. Graph and label the image of $\triangle YZW$ after a translation 2 units right and 1 unit down.



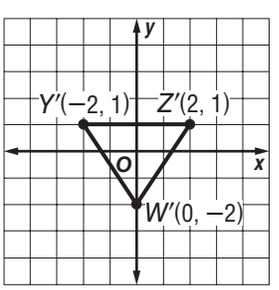
8. _____

9. Graph and label the image of $\triangle YZW$ after a reflection over the y-axis.



9. _____

10. Graph and label the image of $\triangle YZW$ after a dilation by a scale factor of $\frac{1}{2}$.



10. _____