Name _____ Class _____ Date _____

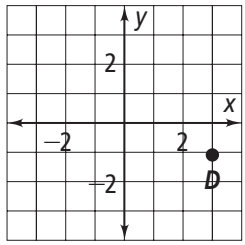
9-2 Standardized Test Prep

Reflections

Multiple Choice

For Exercises 1–5, choose the correct letter.

1. In the graph at the right, point D is reflected across the y-axis. What are the coordinates of its image?



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

(B) $(3, 1)$ (D) $(-3, 1)$

2. The coordinates of the vertices of $\triangle CDE$ are $C(1, 4)$, $D(3, 6)$, and $E(7, 4)$. If the triangle is reflected over the line $y = 3$, what are the coordinates of the image of D?

(F) $(3, -6)$ (G) $(3, -3)$ (H) $(3, 0)$ (I) $(3, 9)$

3. What is true for an image and a preimage in a reflection?

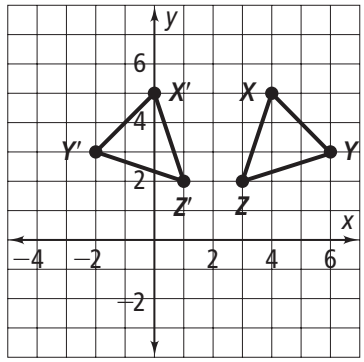
(A) The image is larger than the preimage.

(B) The image is smaller than the preimage.

(C) The image and the preimage have the same orientation.

(D) The image and the preimage have different orientations.

4. In the graph at the right, what is the line of reflection for $\triangle XYZ$ and $\triangle X'Y'Z'$?



(F) the x-axis

(G) the y-axis

(H) $x = 2$

(I) $y = 2$

5. What is the image of $A(3, -1)$ after a reflection, first across the line $y = 3$, and then across the line $x = -1$?

(A) $(-5, 7)$ (C) $(-5, -1)$

(B) $(3, -1)$ (D) $(1, -5)$

Extended Response

6. $RSTU$ has coordinates $R(0, 0)$, $S(2, 3)$, $T(6, 3)$, and $U(4, 0)$. If the parallelogram is reflected over the line $y = x$, what will the coordinates of the image be?