6NS.6b Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Period \_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_

1. The points (1, 3), (-1, 5), (-3, 3), and (4, -4) have been graphed on the coordinate plane.

 Reflect each point across the *x*-axis. What are the coordinates of the reflected points?

 When the star (1, 3) is reflected across the *x*-axis, the new point is located at \_\_\_\_\_.

 When the triangle (-1, 5) is reflected across the *x*-axis, the new point is located at

 \_\_\_\_\_.

 When the smiley face (-3, 3) is reflected across the *x*-axis, the new point is located at

 \_\_\_\_\_.

 When the lightning bolt (4, -4) is reflected across the *x*-axis, the new point is located at

 \_\_\_\_\_.

 What similarities do you notice between the coordinates of the original point and the

 reflected point? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



2. The points (1, 3), (-1, 5), (-3, 3), and (4, -4) have been graphed on the coordinate plane.

 Reflect each point across the *y*-axis. What are the coordinates of the reflected points?

 When the star (1, 3) is reflected across the *y*-axis, the new point is located at \_\_\_\_\_.

 When the triangle (-1, 5) is reflected across the *y*-axis, the new point is located at

 \_\_\_\_\_.

 When the smiley face (-3, 3) is reflected across the *y*-axis, the new point is located at

 \_\_\_\_\_.

 When the lightning bolt (4, -4) is reflected across the *y*-axis, the new point is located at

 \_\_\_\_\_.

 What similarities do you notice between the coordinates of the original point and the

 reflected point? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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3. The smiley face, located at point (-4, 5), has been reflected across the *y*-axis**.**

The new location of the smiley face is (4, 5). Plot it.

 What is the distance between (-4, 5) and (4, 5)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Write a number sentence using the distance from the *y*-axis to help justify your answer.

** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

4. A point, located at (-3, -4), has been reflected across the *x*-axis.

 The new point has the coordinates (3, -4). Plot it.

 What is the distance between (-3, -4) and (3, -4)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Write a number sentence using the distance from the *x*-axis to help justify your answer.

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