Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_ Period: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_

**2.3B Multiple Transformations\_ Classwork**

*OBJECTIVE: Identify reflections. Reflect figures in the x-axis or the y-axis of the coordinate place. CCSS: 8.G.1, 2 and 3*

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| 1.$$Translate ΔALT if A\left(-5,-1\right), L\left(-3,-2\right), T\left(-3,2\right)$$$$by the rule 6 units right and 3 units down, then $$$reflect the$ $image over the y-axis.$Image result for graphingA’: L’: T’:A’’: L’’: T’’: | 2.$$Reflect ΔTAB if T\left(2,3\right), A\left(1,1\right), and B\left(4,-3\right)over the$$$$x-axis, then reflect the image over the y-axis.$$Image result for graphingT’: A’: B’:T’’: A’’: B’’: |
| 3.$$Reflect ΔCAB if C\left(2,3\right), A\left(0,1\right), and B\left(4,-3\right) over$$$$the y-axis, then translate the image by the rule$$$$\left(x,y\right)\rightarrow \left(x+3, y-4\right).$$Image result for graphingC’: A’: B’:C’’: A’’: B’’: | 4.$$Translate ΔEAT if E\left(1,3\right), A\left(2,1\right), and T\left(3, 3\right) by$$$$the rule 4 units up, then reflect the image over the$$$$x-axis.$$Image result for graphingE’: A’: T’:E’’: A’’: T’’: |
| 5.The coordinates of a point and its image are given. Is the reflection in the x-axis or the y-axis? Explain. (-8, 3) 🡪 (8, 3) | 6. The coordinates of a point and its image are given. Is the reflection in the x-axis or the y-axis? Explain. (-2, 4) 🡪 (-2, -4) |
| 7. Identify and write a rule for the transformations. (x, y) 🡪PRE-IMAGEIMAGE | 8. Identify and write a rule for the transformations. x, y) 🡪 |

**Practice Problems- textbook: page 59 #19-24**

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| --- | --- |
| 1. The coordinates of a point and its image are given. Is the reflection in the x-axis or the y-axis? Explain.

 (2, -2) 🡪 (2, 2) | 1. The coordinates of a point and its image are given. Is the reflection in the x-axis or the y-axis? Explain.

 (-4, 1) 🡪 (4, 1) |
| 1. The coordinates of a point and its image are given. Is the reflection in the x-axis or the y-axis? Explain.

 (-2, -5) 🡪 (2, -5) | 1. The coordinates of a point and its image are given. Is the reflection in the x-axis or the y-axis? Explain.

 (-3, -4) 🡪 (-3, 4) |
| 1. Find the coordinates of the figure after the transformation: Translate the triangle 1 unit right and 5 units down. Then reflect the image in the y-axis

S’: T’: R’:S’’: T’’: R’’: | 1. Find the coordinates of the figure after the transformations: Reflect the trapezoid in the x-axis. Then translate the trapezoid 2 units left and 3 units up.

X’: Y’: Z’: W’:X’’: Y’’: Z’’: W’’: |