

**PROBLEM-OF-THE-DAY: ALGEBRA 1****WEEK:** January 14 to January 18**DAY:** Monday

**RISD Objective:** Given a figure in the coordinate plane, students will be able to determine the coordinates of its image after it has undergone a translation, reflection,  $180^\circ$  rotation about the origin, or dilation.

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**PROBLEM #82**

**A triangle is defined by the points  $(-13, -10)$ ,  $(-7, 7)$ , and  $(11, 2)$ . Find the coordinates of the points after the triangle has been reflected across the y-axis. Explain your work.**

**MODEL SOLUTION #82**

**When reflecting across the y-axis, all of the x coordinates become the opposite of what they were and the y coordinates stay the same.**

**Therefore, the coordinates of the reflected triangle are (13, -10), (7, 7), and (-11, 2).**