Worksheet on Translations, Reflections, and Rotations

This worksheet is intended for use with the lesson Translations, Reflections, and Rotations.

1.   Choose a new square. Describe its original position and size. Draw and label a sketch, if necessary:

Rotate it 90 degrees. Translate it so that it is in the 4th quadrant. Reflect it over a line y="a number" so that the square is in the 1st quadrant.

Describe how you can get the shape back in its original position.

2.   Choose a new triangle. Describe its original position and size. Draw and label a sketch, if necessary:

Rotate, Translate, and Reflect the triangle so that the sides are touching the pre-image in such a way to form a parallelogram with both triangles. List your steps here:

3. Choose a new parallelogram. Describe its original position and size. Draw and label a sketch, if necessary:

Rotate, Translate, and Reflect the parallelogram several time, listing your steps here:

Now, challenge a friend to get the parallelogram back into its original position! Are the steps that your friend used the reverse of your steps, or are they different?