Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_

**Transformations Homework -- Mixed Practice**

Directions: Given the pre-image, find two possible ways to get the following image.

1.

Method 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Method 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

2. Meredith performed the transformations below. She used a rotation first and then a translation. Verify that her method is possible by describing the transformations she may have used.



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3. In the graph below, there is a pre-image and an image, but we do not know how to get from the pre-image to the image. Three students think they found a possible set of transformations. Which student(s) are correct? Construct an argument that justifies your answer.

**Jackie:** If you rotate $∆ ABC$ 180o clockwise, then you will get the$ ∆ A'B'C'$.

**Joe:** If you reflect the pre-image across the y-axis, and then reflect that image across the x-axis, you will get$ ∆ A'B'C'$.

**Damien:** If you reflect the pre-image across the x-axis and then rotate that image 90o clockwise, you will get$ ∆ A'B'C'$.



**Jackie**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Joe**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Damien**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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