**Composition of Transformations Notes** Name\_\_\_\_\_\_\_\_\_\_\_\_

**Composition of Transformation**: any combination of a reflection, rotation, translation, or dilation. The new image could be similar (**non-rigid transformation**) or congruent (**rigid** **transformation)** to the original.

**Examples:**

|  |  |
| --- | --- |
| **1) What transformations and/or dilations have occurred?****Are the figures similar or congruent?** | **2) What transformations and/or dilations have occurred?****Are the figures similar or congruent?** |
| **3) Dilate the object with a scale factor of ½, then rotate 90o clockwise.****Give the new coordinates** | **4) Rotate the figure 180o counterclockwise, then translate 5 units up.****Give the new coordinates** |

![C:\Documents and Settings\jainslie\Local Settings\Temporary Internet Files\Content.IE5\6W2FJPU3\MC900432687[1].png]()**Pause the video and try the ones on the back on your own!**

**Then press play and check your answers with a color pen.**

|  |  |
| --- | --- |
| **1) What transformations and/or dilations have occurred?****Are the figures similar or congruent?** | **2) What transformations and/or dilations have occurred?****Are the figures similar or congruent?** |
| **3) Reflect over the y-axis, then dilate to a scale factor of 3.****Give the new coordinates.** | **4) Rotate 90o counterclockwise, translate 6 units down, then reflect over the x-axis.****Give the new coordinates.** |