

DIRECTIONS: Answer the following questions.

If your answer describes a ***translation***, you should include directions of the movement and the number of units.

If your answer describes a ***rotation***, you should include number of degrees and whether it is clockwise or counter-clockwise.

If your answer describes a ***reflection***, you should include the line of reflection (x-axis or y-axis)

1. SHAPE A is a _____ of SHAPE B.

2. SHAPE A is a _____ of SHAPE C.

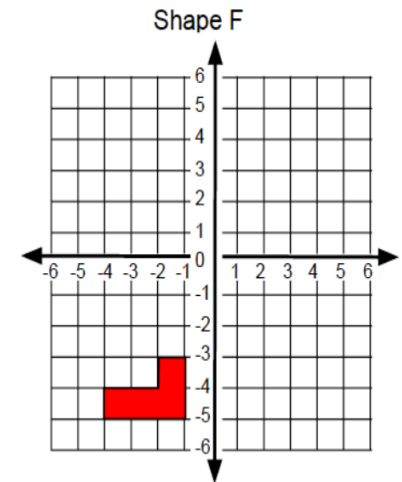
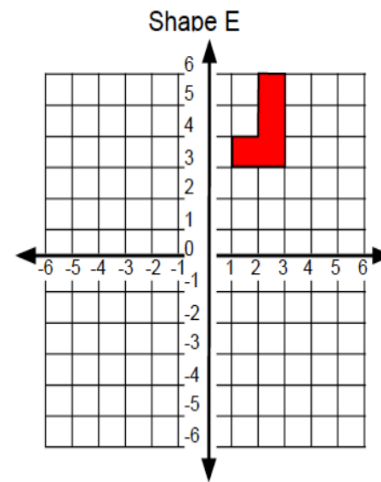
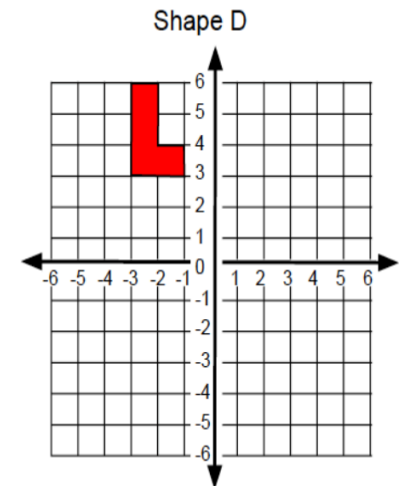
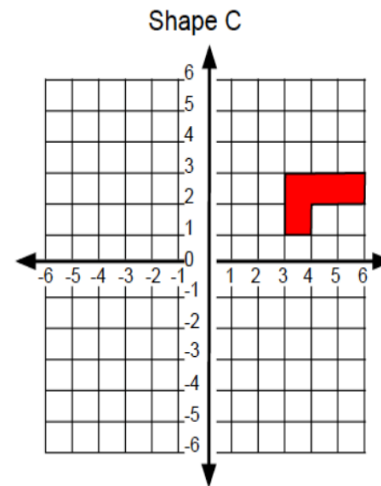
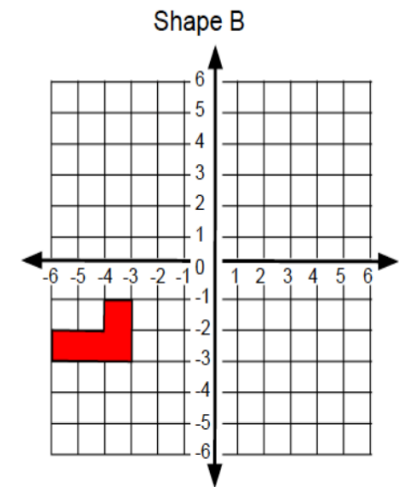
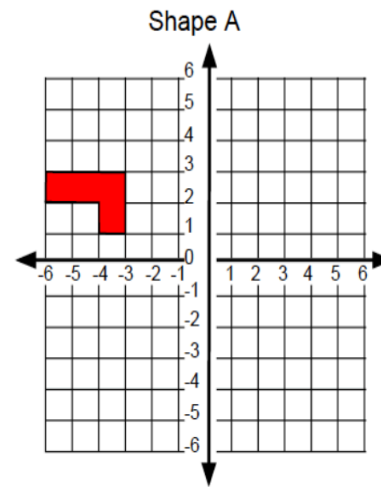
3. SHAPE B is a _____ of SHAPE C.

4. SHAPE B is a _____ of SHAPE F.

5. SHAPE D is a _____ of SHAPE E

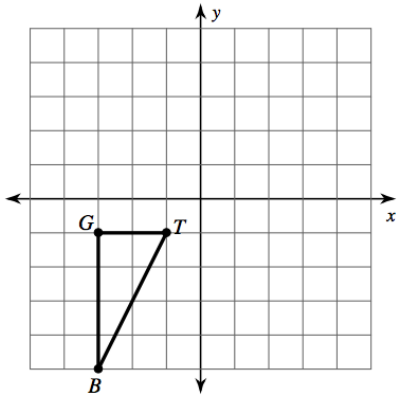
6. Describe all the steps (in detail) necessary to translate SHAPE B to the location of SHAPE F.

7. Describe the exact transformations necessary to make SHAPE F a reflection of SHAPE A over the x-axis.

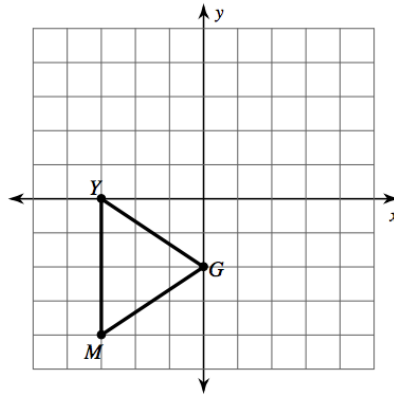


Draw the image after the translation. Label each figure. Ex.) $ABC \rightarrow A'B'C'$

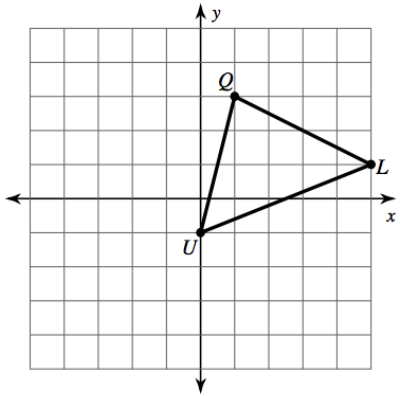
1) translation: 5 units right and 1 unit up



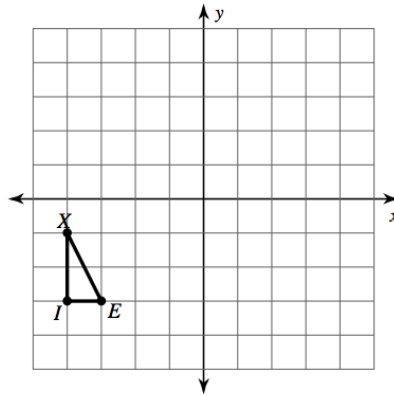
2) translation: 1 unit left and 2 units up



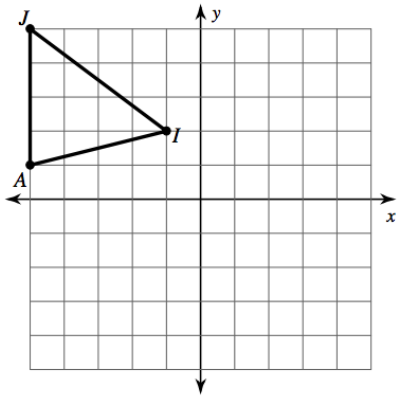
3) translation: 3 units down



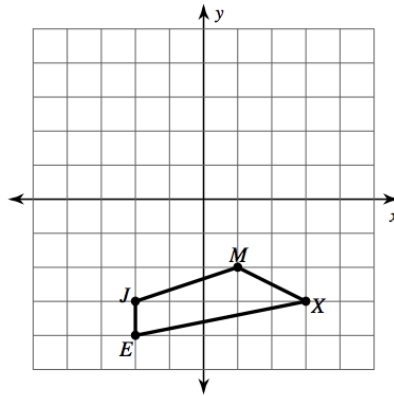
4) translation: 5 units right and 2 units up



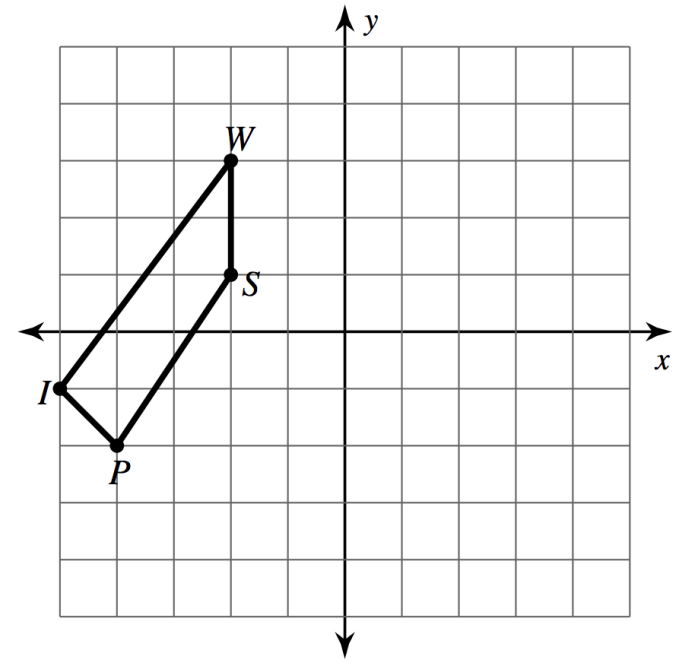
5) translation: 4 units right and 4 units down



6) translation: 2 units right and 3 units up



Draw and label a reflection across the y-axis



Draw and label a reflection across the x-axis

