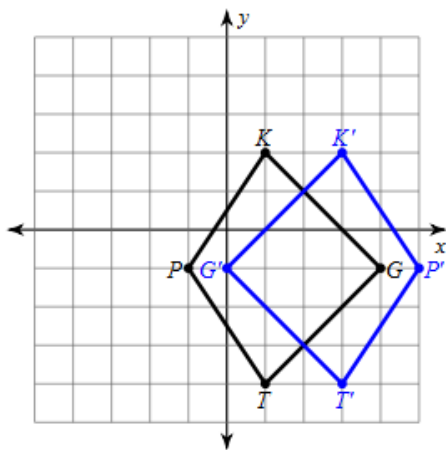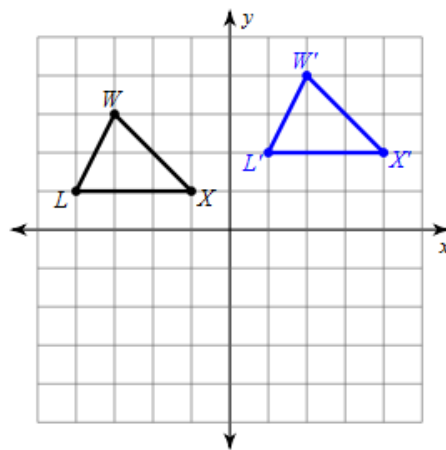Transformations Practice

Describe each transformation in words. Then write the rule.
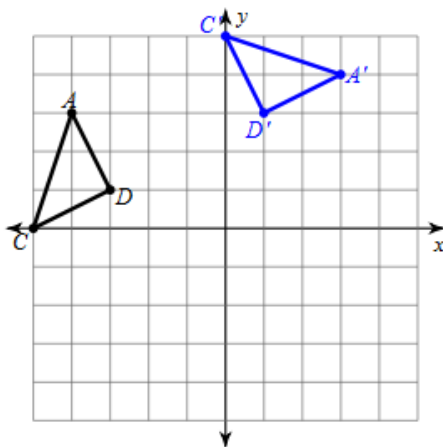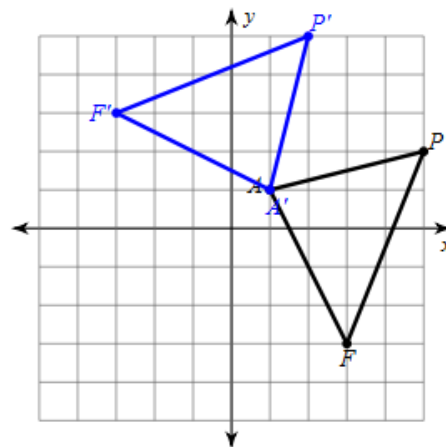
1)

2)

3)

4)

Find the coordinates of the image for each of the following. Then write a rule for the transformation or composition of transformations.

5)   Pre-Image: A(5, -6), B(-1, -2), C(2, 3)

        Rotate 90° clockwise around the origin; then reflect over the x-axis.

6)   Pre-Image: X(-8, 7), Y(-2, 1), Z(-4, -6)

        Reflect over the line y=-x; translate three units to the left; then rotate 180° around the origin.

7)   Pre-Image: K(7, 2), L(6, -4), M(3, -3), N(2, 3)

        Rotate 90° counterclockwise around the point (-1, 4).

8)   Pre-Image: G(0, 6), H(5, 3), I(8, -4), J(-2, -1)

        Translate by the rule (x, y)→(x – 5, y + 3); then reflect over the line y = 3.