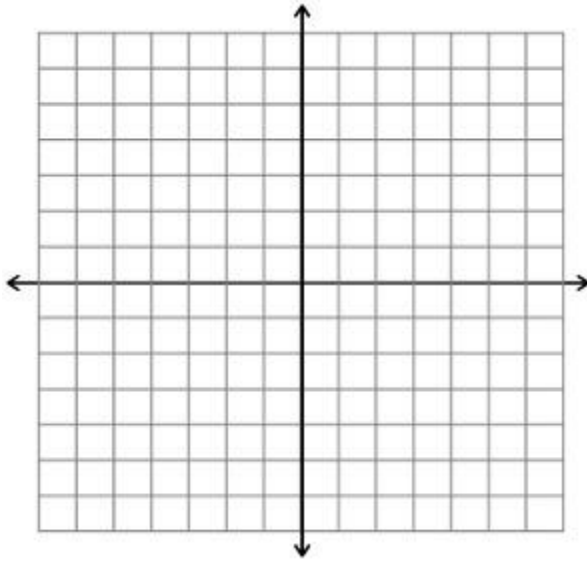


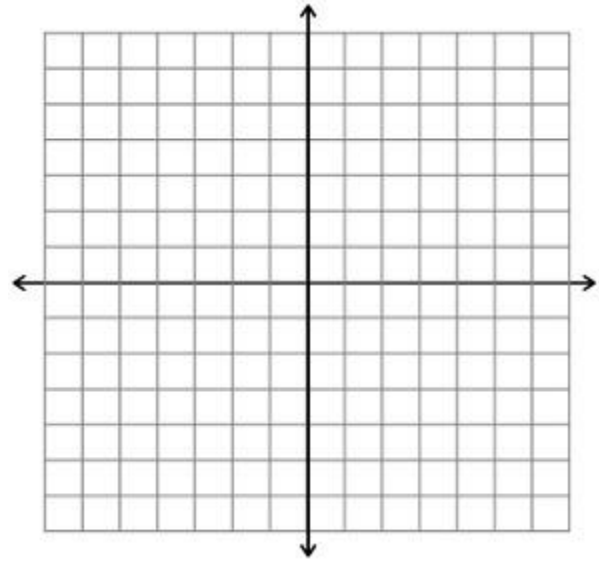
Multiple Transformations

For each question plot the given points and connect them to make the desired shape. Label the vertices of the original shape. Graph and label the transformations of the original shape according to the given rules. There are two transformations. Show all three shapes on your graph. You will not use a graph for questions #3 and #4. All dilations are with respect to the origin.

1. Trapezoid $A(-2, -1), B(-1, 1), C(0, 1), D(0, -1)$.
Dilate using a scale of 2.
Translate 6 units right and 2 units up.



2. Trapezoid $A(-4, 0), B(-2, 4), C(2, 4), D(6, 0)$.
Dilate using a scale of $1/2$.
Translate 2 units right and 3 units down.



3. The vertices of a given figure are given:
 $A(-5, 3), B(-2, 3), C(-2, 1), D(-5, 1)$.
Reflect in the y -axis.
Dilate with a scale factor of 2.
Write the new coordinates under these two transformations.

4. The vertices of a given figure are given:
 $A(-9, -9), B(-3, -6), C(-3, -9)$.
Dilate with a scale factor of $2/3$.
Translate 2 units up.
Write the new coordinates under these two transformations.