

*Directions: Use graph paper to perform the following transformations. Fill in the chart with the coordinates of the image. Attach your graph paper to the worksheet!*

1. Pre-image: A(0,0), B(8,1), C(5,5)

Rotate the figure $180^\circ$	
Reflect the figure over the x-axis	
Translate the figure 6 units right & 1 unit down	

2. Pre-image: D(-12,6), E(-4,6), F(-6,9), G(-10,9)

Translate the figure according to $(x,y) \rightarrow (x+1,y-4)$	
Reflect the figure over the x-axis	
Reflect the figure over the y-axis	

3. Pre-image: H(2,2), I(-2,2), J(-2,-2), K(2,-2)

Rotate the figure $180^\circ$	
Translate the figure according to $(x,y) \rightarrow (x+2,y+2)$	
Reflect the figure over the line $y = -1$	

4. Pre-image: L(6,1), M(0,9), N(-6,-3), P(3,-12)

Dilate the figure with scale factor of $1/3$	
Translate the figure 7 units left & 10 units up	
Rotate the figure $90^\circ$ clockwise about the origin	