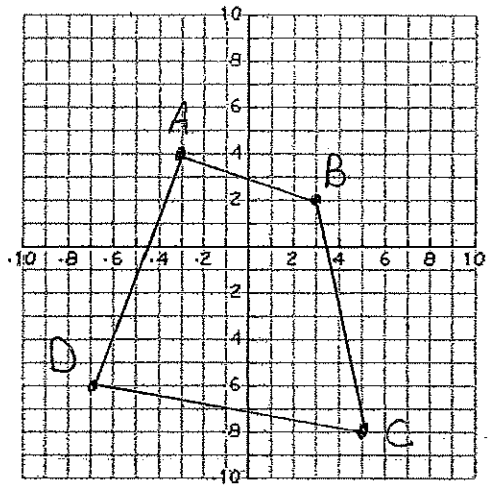
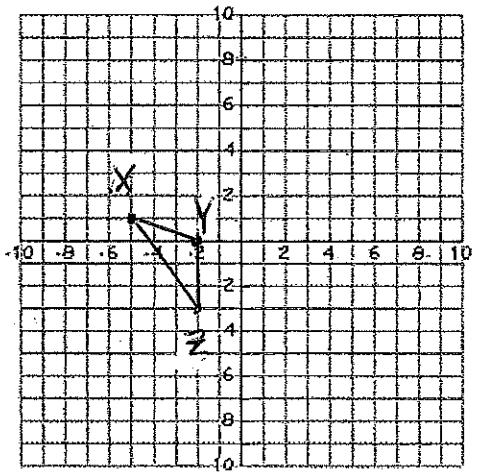
Geometry Dilations WS #3 **Dilations with center of dilation Not at Origin**

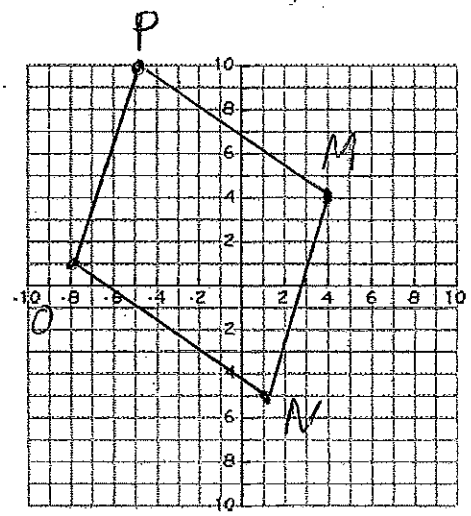
1. Graph the dilated image of Quadrilateral ABCD using a scale factor of ½ and center of dilation (1, -2)



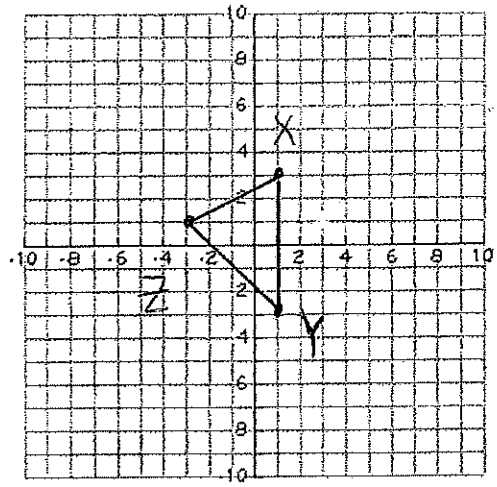
2. Graph the dilated image of Triangle XYZ using a scale factor of 2 and center of dilation (-3, -1)



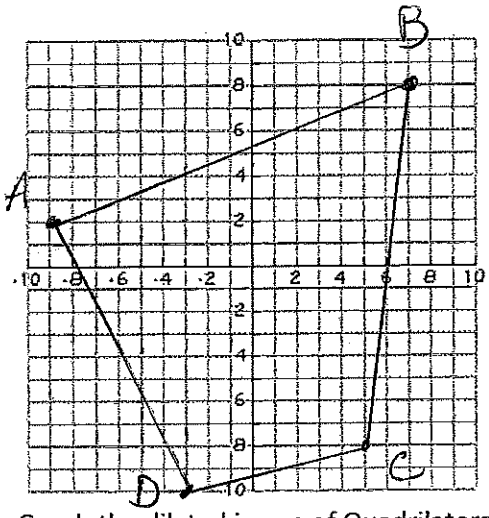
3. Graph the dilated image of Quadrilateral MNOP using a scale factor of 2/3 and center of dilation (-2, 1)



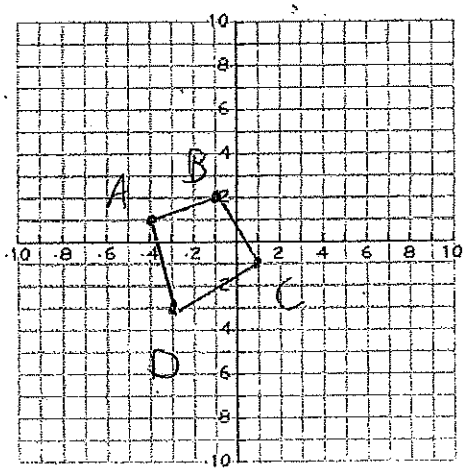
4. Graph the dilated image of Triangle XYZ using a scale factor of 5/2 and center of dilation (-1, 1)



5. Graph the dilated image of Quadrilateral ABCD using a scale factor of ½ and center of dilation (1, -2)

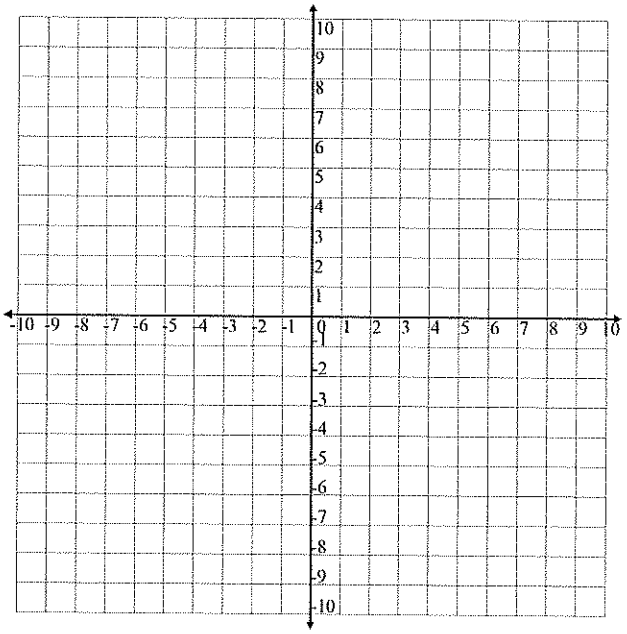


6. Graph the dilated image of Quadrilateral ABCD using a scale factor of 3 and center of dilation (-2, 0)

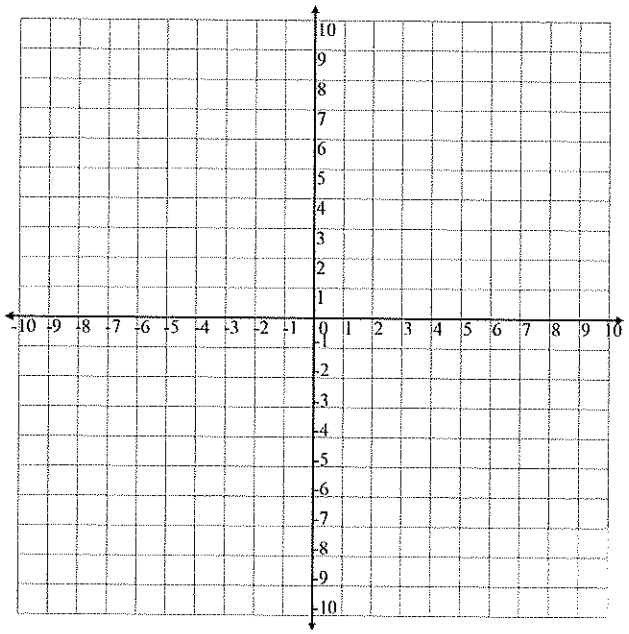


ROTATIONS NOT CENTERED ABOUT THE ORIGIN

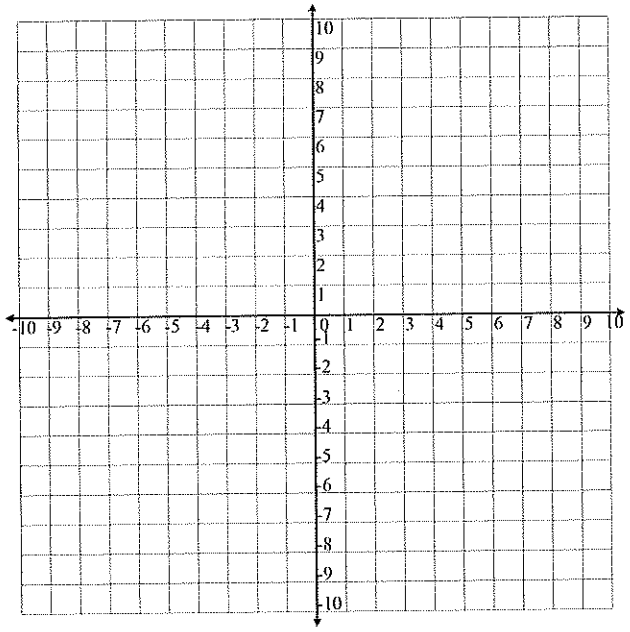
1. Rotate the segment with endpoints B(0, -2) and C(-2, -6) 180° about the point (3, -2).



2. Rotate the segment with endpoints at P(1, -4) and Q(-4, 6) 270° counter clockwise about the point (3, 0).



3. Rotate ΔGHI with G(-3, 4), H(2, -4) and I(3, 6) 270° clockwise about the point (-3, 1).



4. Rotate ΔXYZ with X(5, -2), Y(1, 3) and Z(6, 2) 90° counter clockwise about the point (-4, -1).