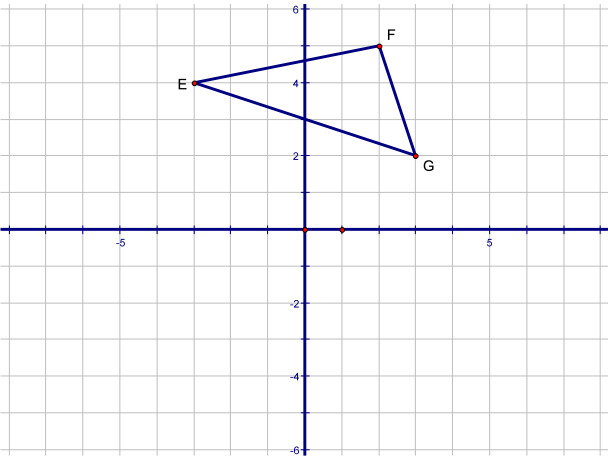
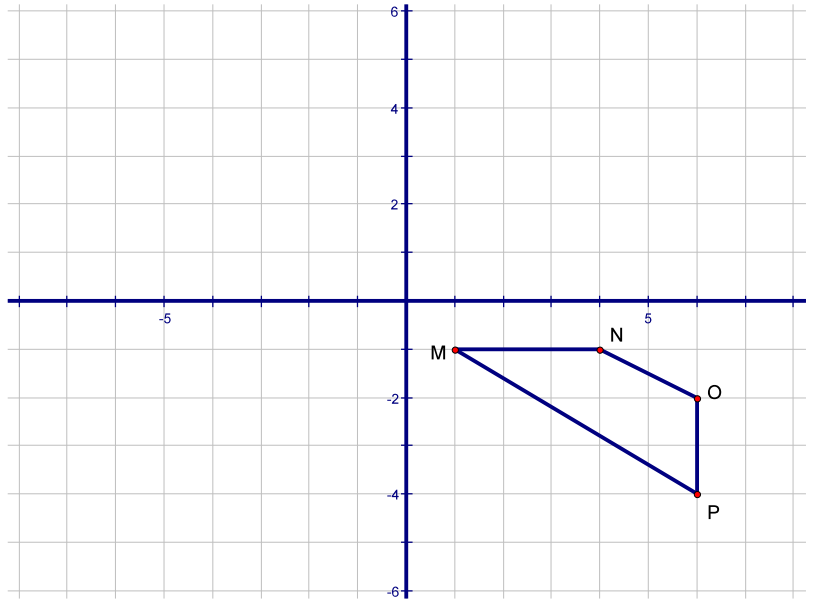


Transformations 2.4 Geometry

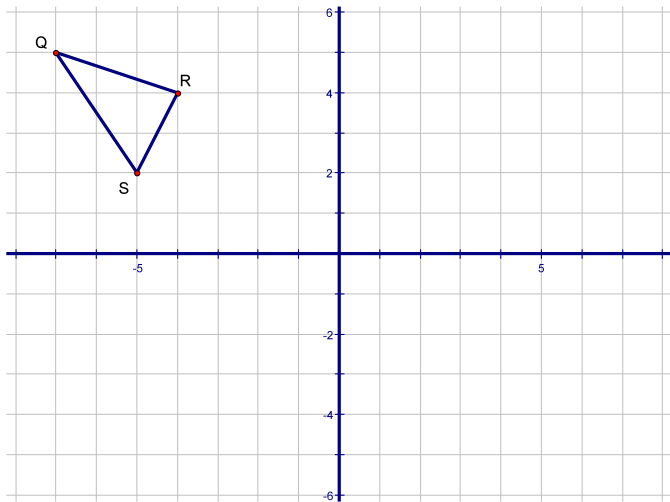
1) Reflect the shape over both axes and give the coordinates of the vertices in each image.



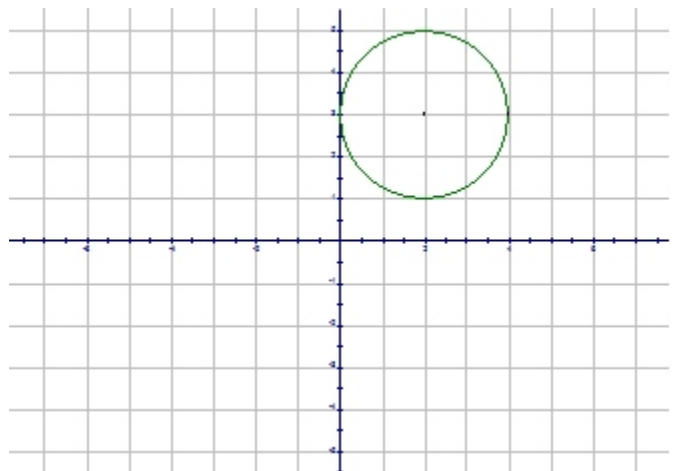
2) Translate the object 5 units to the left and 3 units up, and give the coordinates of the vertices in the image.



3) Dilate the object by a factor of 3 from point Q. Give the coordinates of the vertices in the image.



4) Reflect the circle over the y-axis, and dilate it by a scale factor of $3/2$.



5) The vertices of a shape have coordinates $(-6, -2)$, $(-6, -6)$, $(0, -2)$, and $(0, -6)$.

A. After being transformed, the vertices of the image have coordinates $(6, -2)$, $(6, -6)$, $(0, -2)$ and $(0, -6)$.
What was the transformation that occurred?

B. What was the transformation if the image has coordinates $(-3, -2)$, $(-3, -4)$, $(0, -2)$, and $(0, -4)$?

Transform the figure under the given mapping then state the type of transformation that has occurred.

6) $(1, 3) (-2, -1) (-1, 1)$; $(x, y) \rightarrow (2x, 2y)$

7) $(-4, -1) (2, -2) (-1, -3)$; $(x, y) \rightarrow (x, -y)$

