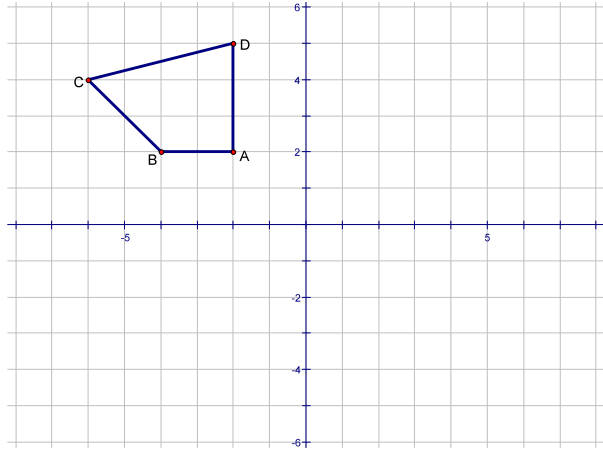
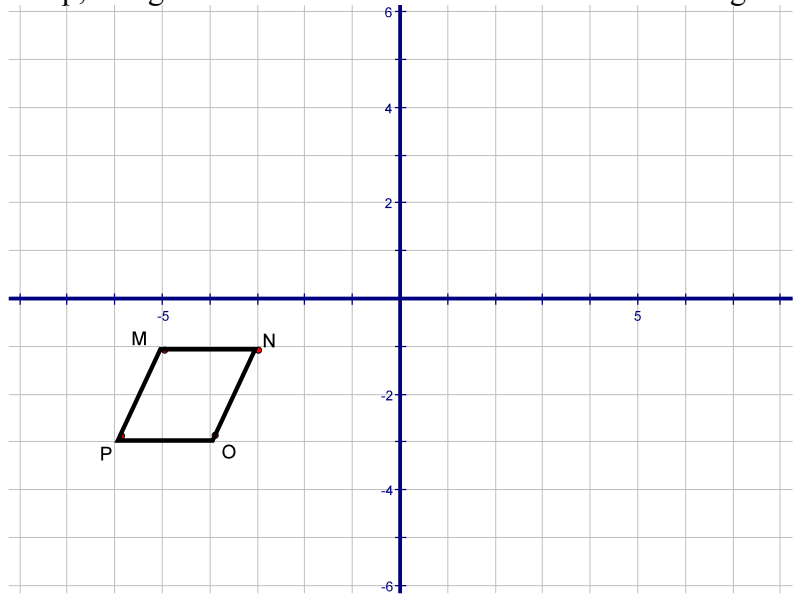


Transformations 2.3  
Geometry

1) Reflect the shape over both axes and give the coordinates of the images.

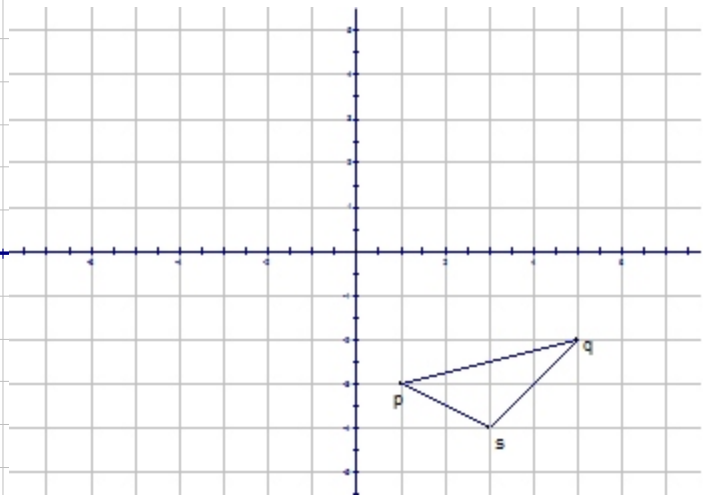
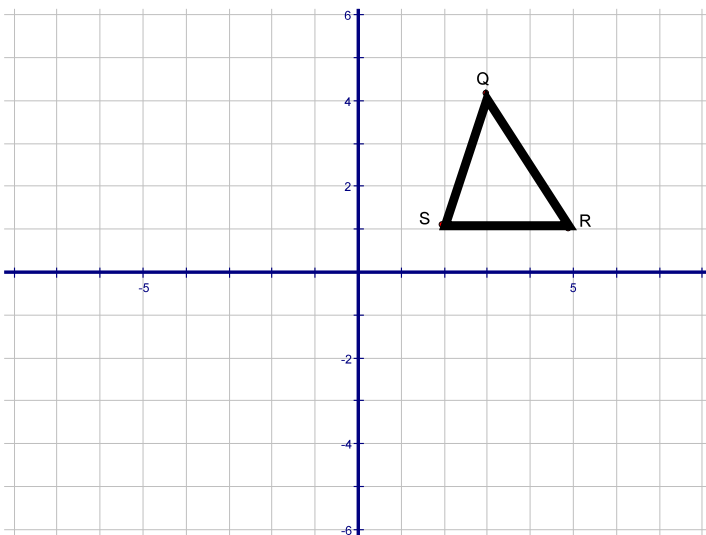


2) Translate the object 7 units to the right and 4 units up, and give the coordinates of the vertices in the image.



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

4) Reflect the object over the x-axis and dilate it by a scale factor of 2 from the origin.



5) The vertices of a figure have coordinates (-5, 6), (1, 6), and (0, 4).

A. After being transformed, the vertices of the image have coordinates (-7, -2), (-1, -2), and (-2, -4). What was the transformation that occurred?

B. What was the transformation if the image has coordinates (1, 0), (1, 6), and (3, 5)?

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

6)  $(4, -3)$   $(0, 0)$   $(2, 2)$ ;  $(x, y) \rightarrow (x + 2, y - 3)$

7)  $(1, 1)$   $(5, 2)$   $(3, 4)$ ;  $(x, y) \rightarrow (-x, y)$

