## Multi-Step Transformations 2

Name

The vertices of a figure are given. Find the coordinates of the figure after the transformations given.
1.) Rotate $90^{\circ}$ clockwise about the origin. Then dilate with respect to the origin using a scale factor of 3 . Find the coordinates after each transformation given.
$\mathrm{J}(1,1) \mathrm{K}(3,4), \mathrm{L}(5,1)$

2.) Dilate with respect of the origin using a scale factor of 2 . Then dilate with respect to the origin using a scale factor of 0.5 . Find the coordinates after each transformation given. $P(-2,2), Q(4,2), R(2,-6), S(-4,-6)$

3.) The vertices of a figure are $P(1,2), Q$ $(3,4)$, and $R(-1,6)$. Dilate with respect to the origin using a scale factor of 2 and then translate 4 units right and 3 units down. Find the coordinate of the figure after the transformations given.
4.) The vertices of a trapezoid are $\mathrm{A}(-4,0), \mathrm{B}$ $(-2,4), C(2,4)$, and $D(6,0)$. Dilate the trapezoid with respect to the origin using a scale factor of 0.5 . Then translate it 2 units right and 3 units down. Find the coordinate of the figure after the transformations given.



