

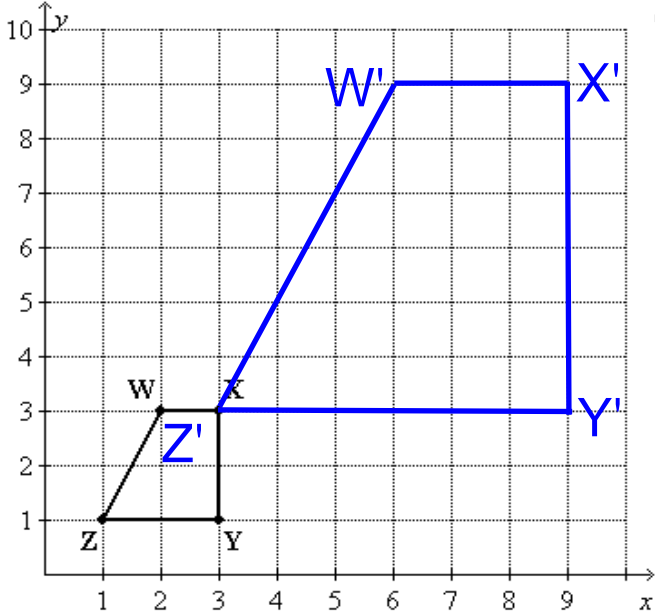
# Dilation Practice

For each dilation described, draw in the image, label the vertices, and write down the coordinates of the Pre-Image and the Image.

Rule for dilating a figure with the center at the origin and scale factor of "k".

$$(x,y) \longrightarrow (k \cdot x, k \cdot y)$$

1. Center at (0, 0) Scale Factor = 3



Pre-Image Coordinates

Image Coordinates

W(2,3)

W'(6,9)

X(3,3)

X'(9,9)

Y(3,1)

Y'(9,3)

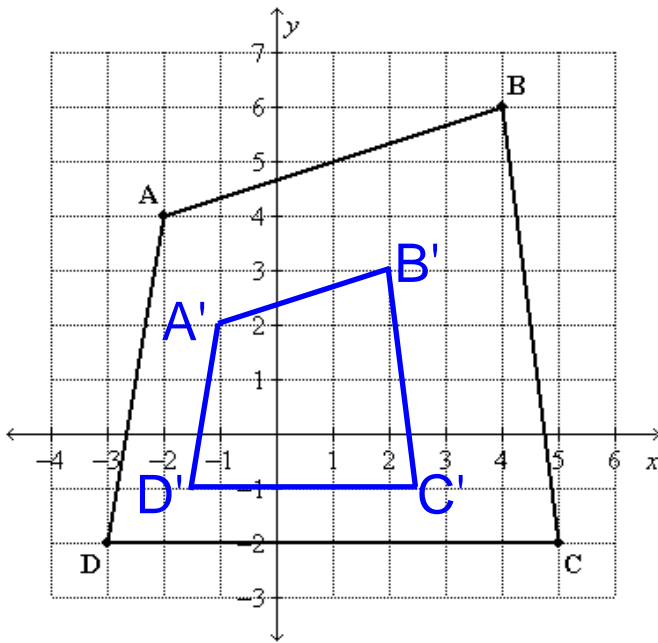
Z(1,1)

Z'(3,3)

2. Center at (0, 0) Scale Factor = .5

Pre-Image Coordinates

Image Coordinates



A(-2,4)

A'(-1,2)

B(4,6)

B'(2,3)

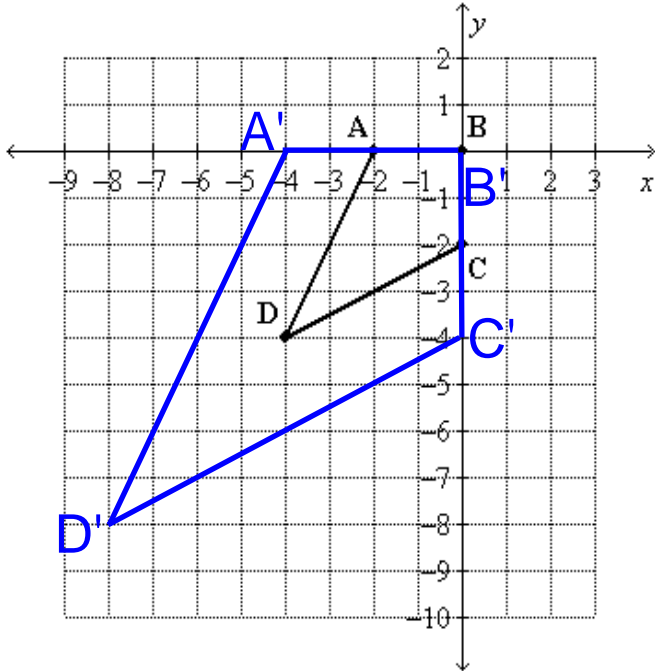
C(5,-2)

C'(2.5,-1)

D(-3,-2)

D'(-1.5,-1)

**3. Center at (0, 0) Scale Factor = 2**



**Pre-Image Coordinates**

**Image Coordinates**

A(-2,0)

A'(-4,0)

B(0,0)

B'(0,0)

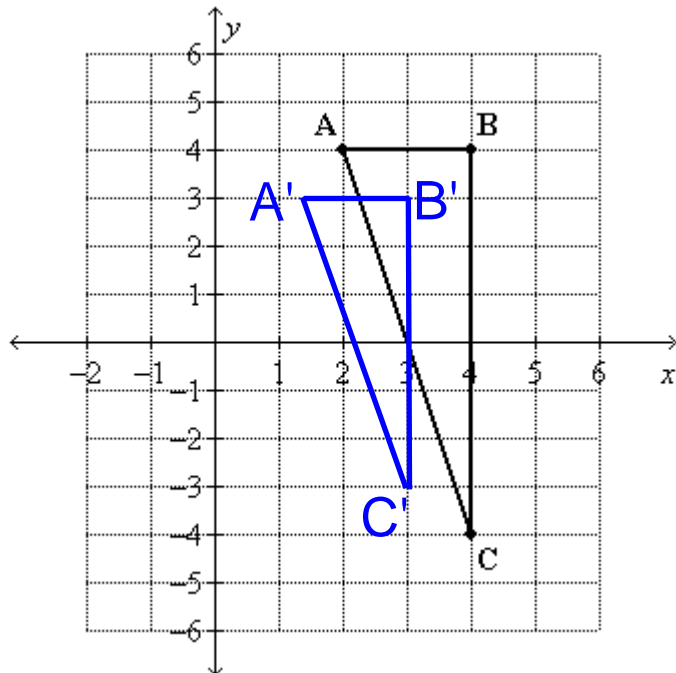
C(0,-2)

C'(0,-4)

D(-4,-4)

D'(-8,-8)

**4. Center at (0, 0) Scale Factor = .75**



**Pre-Image Coordinates**

**Image Coordinates**

A(2,4)

A'(1.5,3)

B(4,4)

B'(3,3)

C(4,-4)

C'(3,-3)