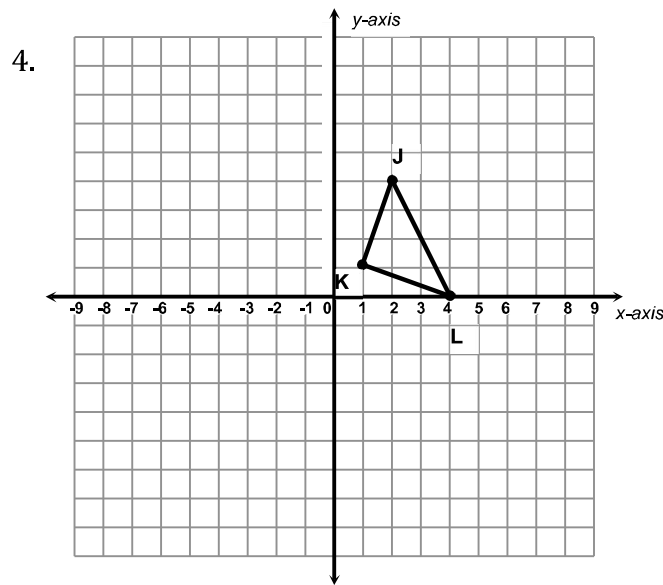


Dilations/Translations Worksheet

Directions: Answer the following questions to the best of your ability. For the y-axis, use the same scaling as the x-axis

1. In Math, the word dilate means to _____ or _____ a figure.
2. If a scale factor is less than 1, then your figure gets _____.
3. If a scale factor is greater than 1, then your figure gets _____.

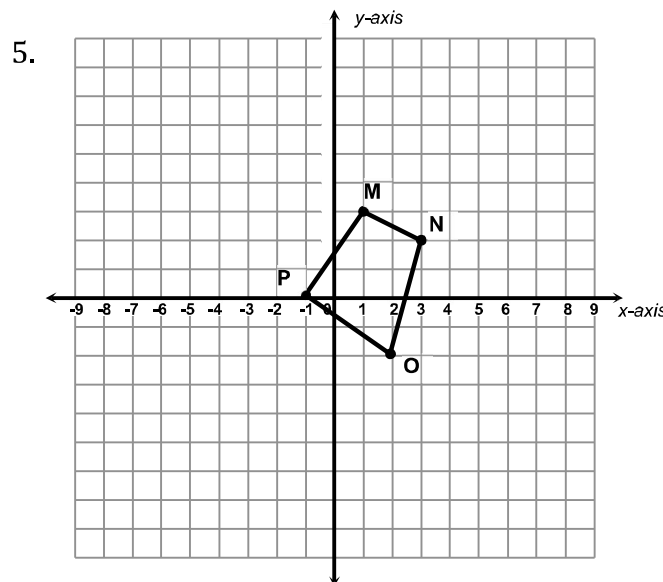


Graph the dilated image of triangle JKL using a scale factor of 2 and (0,0) as the center of dilation.

J: _____ J': _____

K: _____ K': _____

L: _____ L': _____



Graph the dilated image of quadrilateral MNOP using a scale factor of 3 and the origin as the center of dilation.

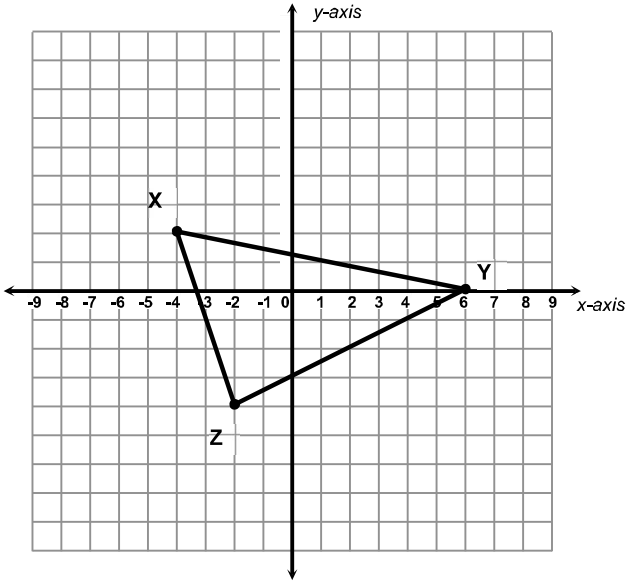
M: _____ M': _____

N: _____ N': _____

O: _____ O': _____

P: _____ P': _____

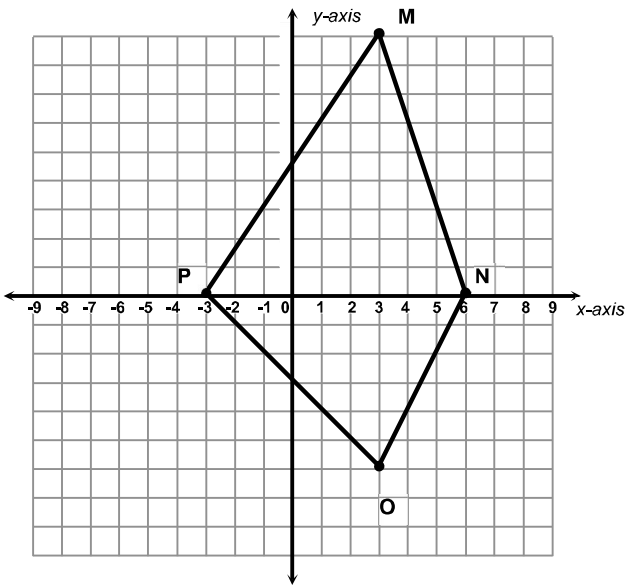
6.



Graph the dilated image of triangle XYZ using a scale factor of 1.5 and (0,0) as the center of dilation.

X: _____ X': _____
 Y: _____ Y': _____
 Z: _____ Z': _____

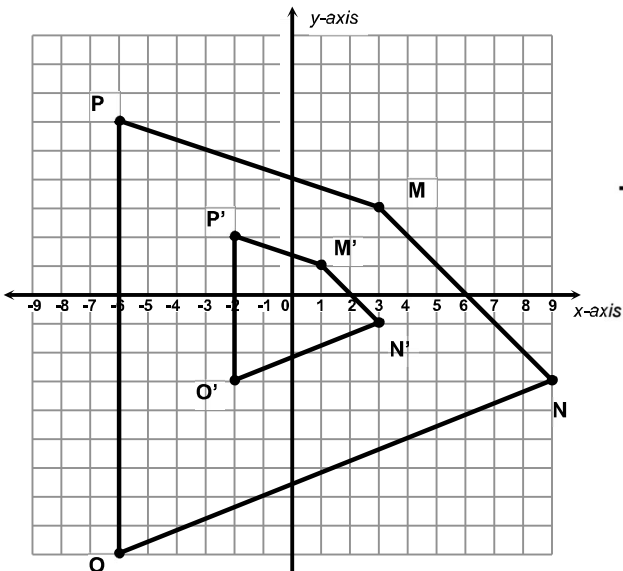
7.



Graph the dilated image of quadrilateral MNOP using a scale factor of $\frac{1}{3}$ and the origin as the center of dilation.

M: _____ M': _____
 N: _____ N': _____
 O: _____ O': _____
 P: _____ P': _____

8.



Describe the dilation of quadrilateral MNOP, using the origin as the center.

Name: _____ Date: _____

9. The table below shows the coordinates of triangle RST and the coordinates of R' in triangle R'S'T'. Triangle R'S'T' is a dilation of triangle RST.

Triangle RST		Triangle R'S'T'	
R	(-2, -3)	R'	(-6, -9)
S	(0, 2)	S'	
T	(2, -3)	T'	

Part A

What are the coordinates of point S' and point T'?

Answer S' = (____, ____)

T' = (____, ____)

Part B

On the grid below, draw triangle RST and triangle R'S'T'.

