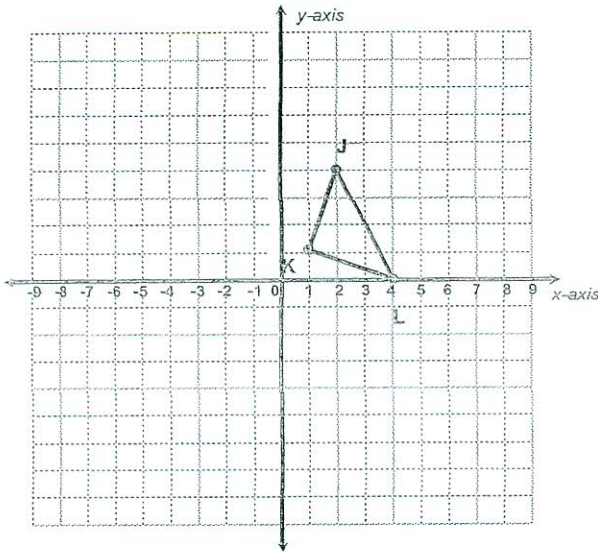


Dilations/Translations Worksheet

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 _____.

4.



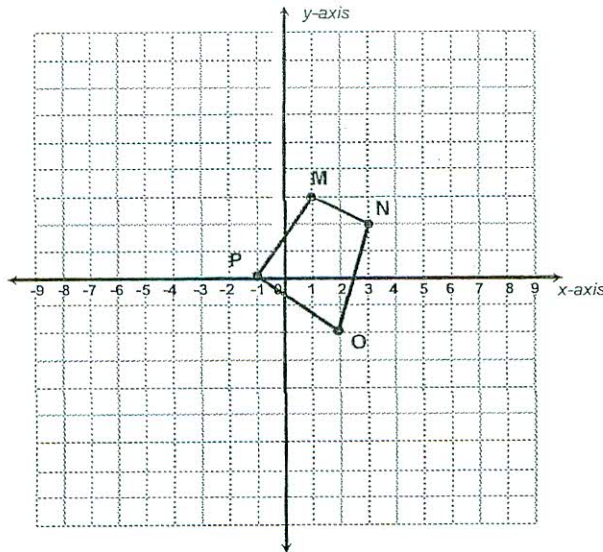
Graph the dilated image of triangle JKL using a scale factor of 2 and (0,0) as the center of dilation.

J: _____ J': _____

K: _____ K': _____

L: _____ L': _____

5.



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

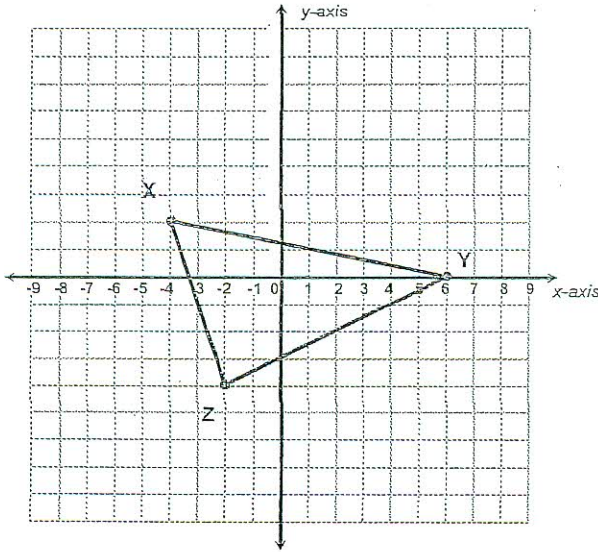
M: _____ M': _____

N: _____ N': _____

O: _____ O': _____

P: _____ P': _____

6.



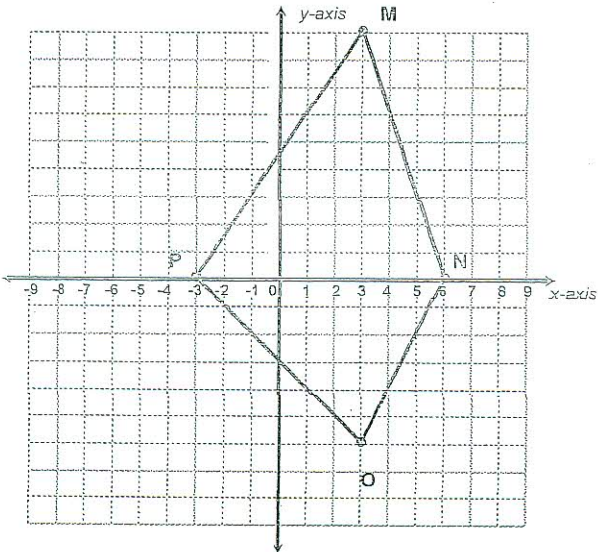
Graph the dilated image of triangle XYZ using a scale factor of 1.5 and (0,0) as the center of dilation.

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.

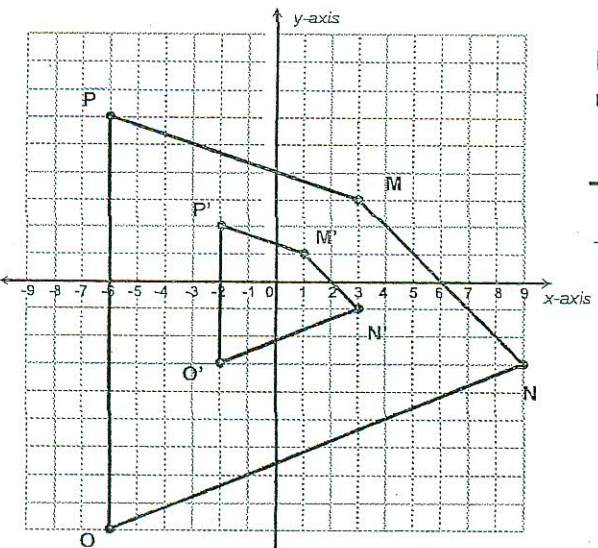
M: _____ M': _____

N: _____ N': _____

O: _____ O': _____

P: _____ P': _____

8.



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

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'	(-5, -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'.

