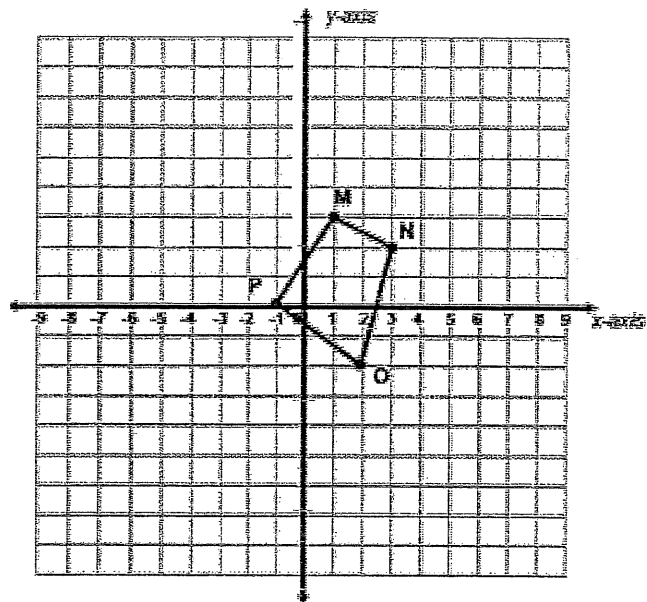


- Graph the dilated image of quadrilateral MNOP using a scale factor of 3 and the origin as the center of dilation



What we found yesterday: (Example #2)

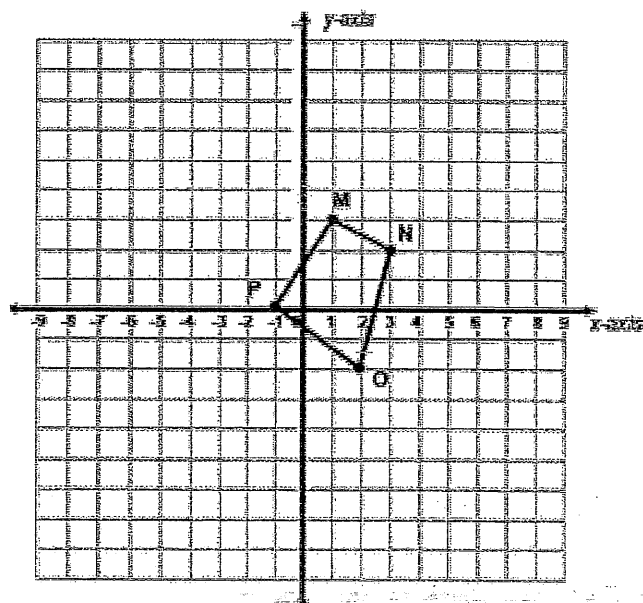
$$M(1, 3) \rightarrow M'(3, 9)$$

$$N(3, 2) \rightarrow N'(9, 6)$$

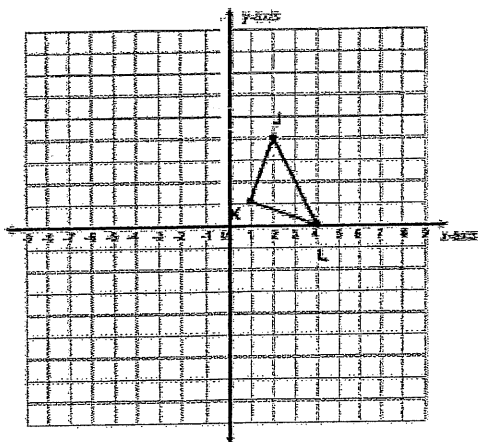
$$O(2, -2) \rightarrow O'(6, -6)$$

$$P(-1, 0) \rightarrow P'(-3, 0)$$

- Graph the dilated image of quadrilateral MNOP using a scale factor of 3 and center of dilation at (1,1)



3. Graph the dilated image of triangle JKL using a scale factor of 2 and $(-1, 2)$ as the center of dilation.

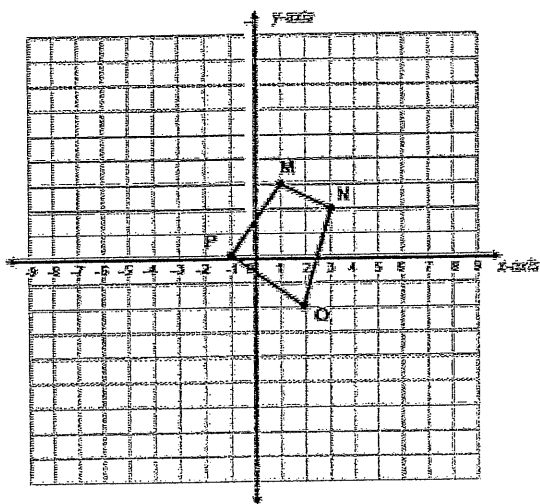


J: _____ J': _____

K: _____ K': _____

L: _____ L': _____

4. Graph the dilated image of quadrilateral MNOP using a scale factor of 3 and $(1, 1)$ as the center of dilation.



M: _____

M': _____

N: _____

N': _____

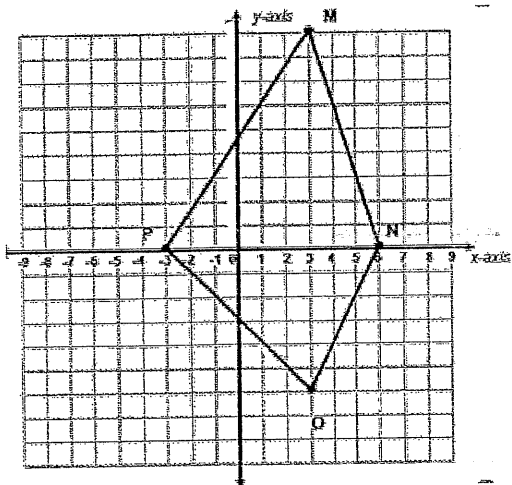
O: _____

O': _____

P: _____

P': _____

5. Graph the dilated image of quadrilateral MNOP using a scale factor of $1/3$ and $(3, 3)$ as the center of dilation.



M: _____

M': _____

N: _____

N': _____

O: _____

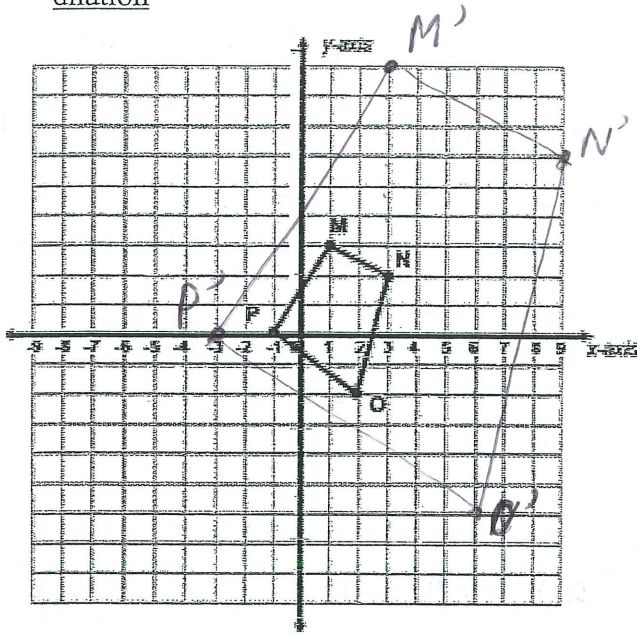
O': _____

P: _____

P': _____

key

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



What we found yesterday: (Example #2)

$$M(1, 3) \rightarrow M'(3, 9)$$

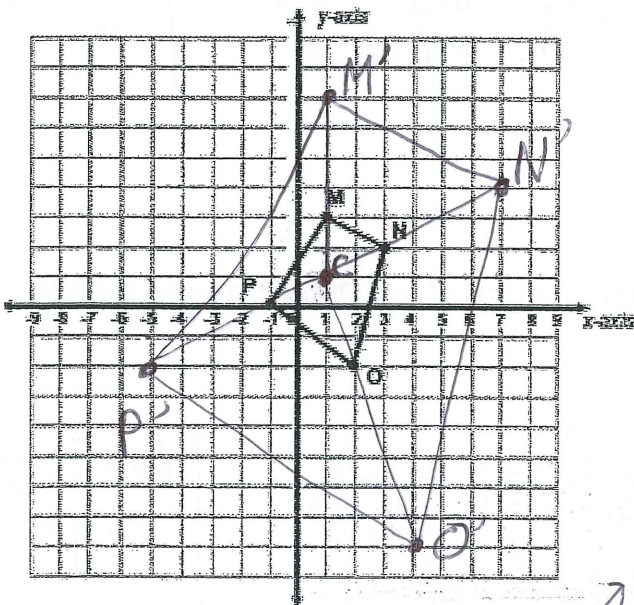
$$N(3, 2) \rightarrow N'(9, 6)$$

$$O(2, -2) \rightarrow O'(6, -6)$$

$$P(-1, 0) \rightarrow P'(-3, 0)$$

count from center of dilation.

2. Graph the dilated image of quadrilateral MNOP using a scale factor of 3 and center of dilation at (1,1)

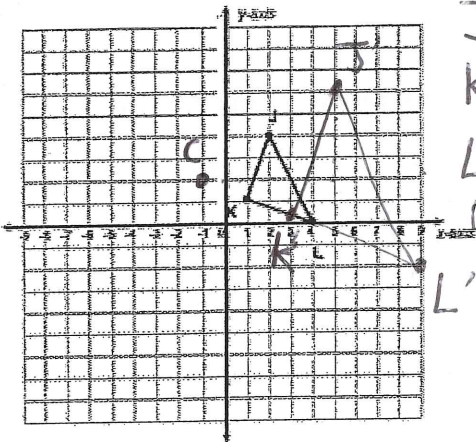


$$\begin{cases} M(0, \uparrow 2) \rightarrow M'(1, \uparrow 7) \\ N(\rightarrow 2, \uparrow 1) \rightarrow N'(\rightarrow 7, \uparrow 4) \\ O(\rightarrow 1, \downarrow 3) \rightarrow O'(\rightarrow 4, \downarrow 8) \\ P(\leftarrow 2, \downarrow 1) \rightarrow P'(\leftarrow 5, \downarrow 2) \end{cases}$$

$$\begin{cases} M' (1, 7) \\ N' (7, 4) \\ O' (4, -8) \\ P' (-5, -2) \end{cases}$$

Locate from origin

3. Graph the dilated image of triangle JKL using a scale factor of 2 and (-1,2) as the center of dilation.

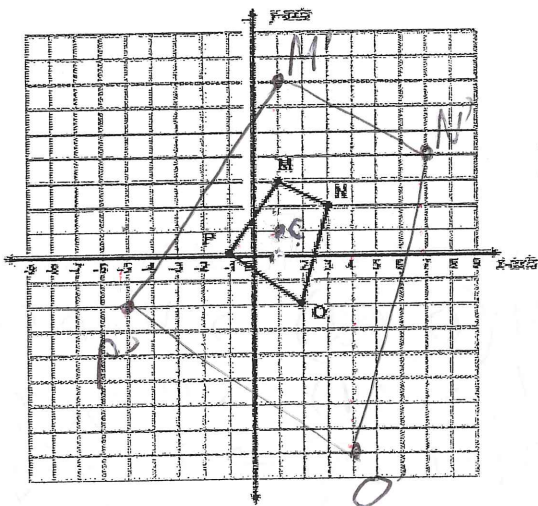


$$\begin{array}{l}
 J(\rightarrow 3, \uparrow 2) \rightarrow J'(\rightarrow 7, \uparrow 4) \quad J: \underline{(2, 4)} \quad J': \underline{(5, 6)} \\
 K(\rightarrow 2, \downarrow 1) \rightarrow K'(\rightarrow 4, \downarrow 2) \quad K: \underline{(1, 1)} \quad K': \underline{(3, 0)} \\
 L(\rightarrow 5, \downarrow 2) \rightarrow L'(\rightarrow 10, \downarrow 4) \quad L: \underline{(4, 0)} \quad L': \underline{(9, -2)}
 \end{array}$$

Locate from center of dilation

Locate from origin

4. Graph the dilated image of quadrilateral MNOP using a scale factor of 3 and (1,1) as the center of dilation.

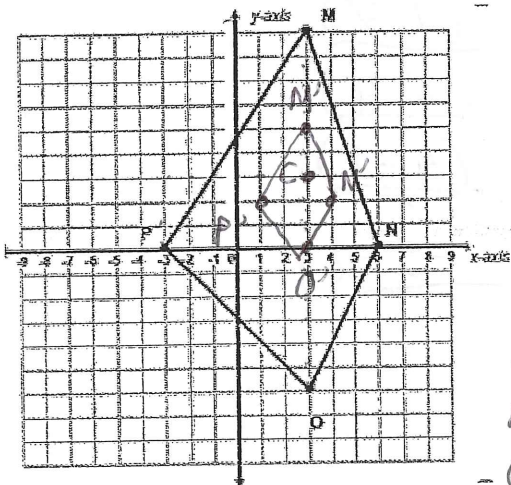


$$\begin{array}{l}
 M(0, \uparrow 2) \rightarrow M'(0, \uparrow 16) \\
 N(\rightarrow 2, \uparrow 1) \rightarrow N'(\rightarrow 6, \uparrow 13) \\
 O(\rightarrow 1, \downarrow 3) \rightarrow O'(\rightarrow 9, \downarrow 9) \\
 P(\leftarrow 2, \downarrow 1) \rightarrow P'(\leftarrow 6, \downarrow 3)
 \end{array}$$

Locate from center of dilation

Locate from origin

5. Graph the dilated image of quadrilateral MNOP using a scale factor of 1/3 and (3, 3) as the center of dilation.



$$\begin{array}{l}
 M: \underline{(3, 9)} \quad M': \underline{(3, 5)} \\
 N: \underline{(6, 0)} \quad N': \underline{(4, 2)} \\
 O: \underline{(3, -6)} \quad O': \underline{(3, 0)} \\
 P: \underline{(-3, 0)} \quad P': \underline{(1, 2)}
 \end{array}$$

Locate from origin

$$\begin{array}{l}
 M(0, \uparrow 9) \rightarrow M'(0, \uparrow 2) \\
 N(\rightarrow 6, \downarrow 0) \rightarrow N'(\rightarrow 1, \downarrow 1) \\
 O(0, \downarrow 9) \rightarrow O'(0, \downarrow 3) \\
 P(\leftarrow 3, \downarrow 0) \rightarrow P'(\leftarrow 2, \downarrow 1)
 \end{array}$$

Locate from center of dilation