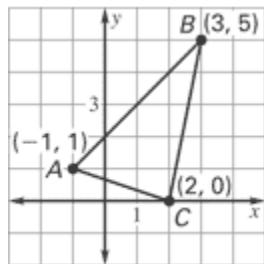


**Write the coordinates of the vertices  $A'$ ,  $B'$ , and  $C'$  after  $\triangle ABC$  is translated.**

1.  $(x, y) \rightarrow (x + 2, y - 1)$



1.  $A' \underline{\hspace{2cm}}$   $B' \underline{\hspace{2cm}}$   $C' \underline{\hspace{2cm}}$

2.  $(x, y) \rightarrow (x - 4, y + 6)$

2.  $A' \underline{\hspace{2cm}}$   $B' \underline{\hspace{2cm}}$   $C' \underline{\hspace{2cm}}$

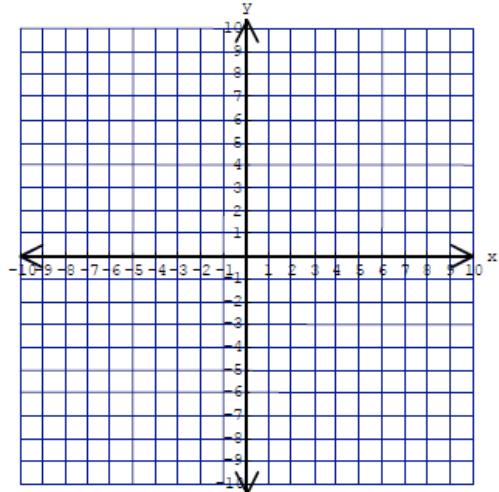
**Graph and find the coordinates of the reflection using a coordinate plane.**

3.  $A(-1, -4)$   $B(-4, -3)$   $C(-6, -6)$  reflected across  $x = 1$

$A' \underline{\hspace{2cm}}$   $B' \underline{\hspace{2cm}}$   $C' \underline{\hspace{2cm}}$

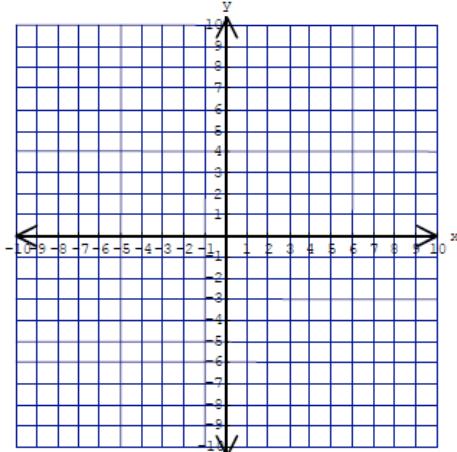
Now reflect the image  $A'B'C'$  across the line  $y = 2$

$A'' \underline{\hspace{2cm}}$   $B'' \underline{\hspace{2cm}}$   $C'' \underline{\hspace{2cm}}$



**4. Dilation:** Graph triangle ABC:  $A(0, 0)$   $B(-2, -1)$   $C(3, -3)$ . Use the origin as the center and use a scale factor of 3 to draw the image.

$A' \underline{\hspace{2cm}}$   $B' \underline{\hspace{2cm}}$   $C' \underline{\hspace{2cm}}$



The vertices of a polygon are given. Name the coordinates of the vertices of the image after a clockwise rotation of the given number of degrees about the origin.

5.  $D(4, -3)$ ,  $E(4, 5)$ ,  $F(-1, -1)$ ;  $90^\circ$

$D' \underline{\hspace{2cm}}$   $E' \underline{\hspace{2cm}}$   $F' \underline{\hspace{2cm}}$

Now rotate the image  $180^\circ$ .

$D'' \underline{\hspace{2cm}}$   $E'' \underline{\hspace{2cm}}$   $F'' \underline{\hspace{2cm}}$

