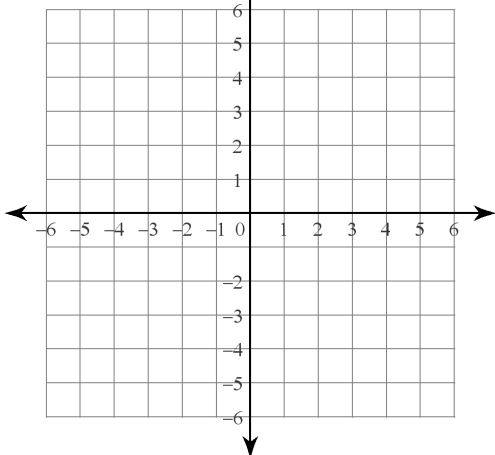


1) Lets try some multiple transformations:

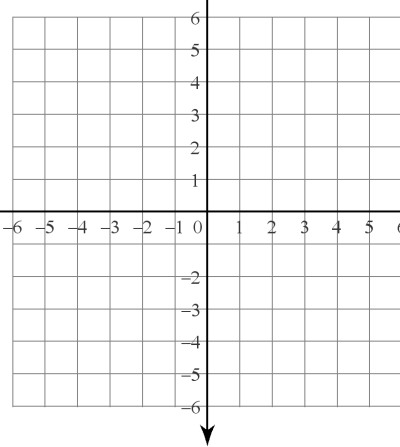
a) Translate  $\triangle ALT$  if  $A(-5,-1)$ ,  $L(-3,-2)$ ,  $T(-3,2)$  by the rule  $(x,y) \rightarrow (x+6, y-3)$ , then reflect the image over the y-axis



$A'$  (\_\_\_\_,\_\_\_\_)  
 $L'$  (\_\_\_\_,\_\_\_\_)  
 $T'$  (\_\_\_\_,\_\_\_\_)

$A''$ (\_\_\_\_,\_\_\_\_)  
 $L''$ (\_\_\_\_,\_\_\_\_)  
 $T''$ (\_\_\_\_,\_\_\_\_)

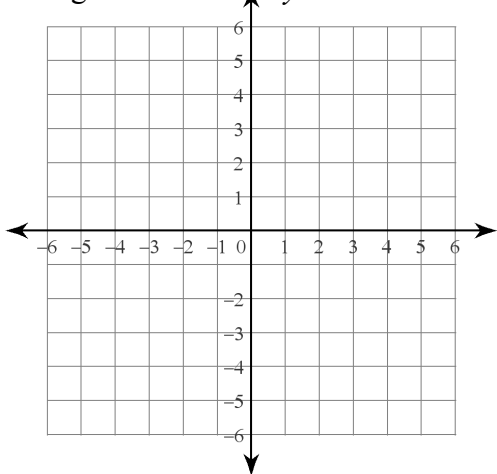
b) Reflect  $\triangle TAB$  if  $T(2,3)$ ,  $A(1,1)$ , and  $B(4,-3)$  over the x-axis, then reflect the image over the y-axis



$T'$ (\_\_\_\_,\_\_\_\_)  
 $A'$ (\_\_\_\_,\_\_\_\_)  
 $B'$ (\_\_\_\_,\_\_\_\_)

$T''$ (\_\_\_\_,\_\_\_\_)  
 $A''$ (\_\_\_\_,\_\_\_\_)  
 $B''$ (\_\_\_\_,\_\_\_\_)

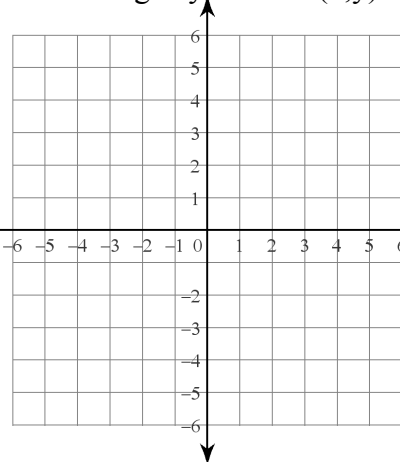
c) Rotate  $\triangle ALT$  if  $A(-5,-1)$ ,  $L(-3,-2)$ ,  $T(-3,2)$   $90^\circ$  clockwise about the origin, then reflect the image over the line  $y = x$



$A'$  (\_\_\_\_,\_\_\_\_)  
 $L'$  (\_\_\_\_,\_\_\_\_)  
 $T'$  (\_\_\_\_,\_\_\_\_)

$A''$ (\_\_\_\_,\_\_\_\_)  
 $L''$ (\_\_\_\_,\_\_\_\_)  
 $T''$ (\_\_\_\_,\_\_\_\_)

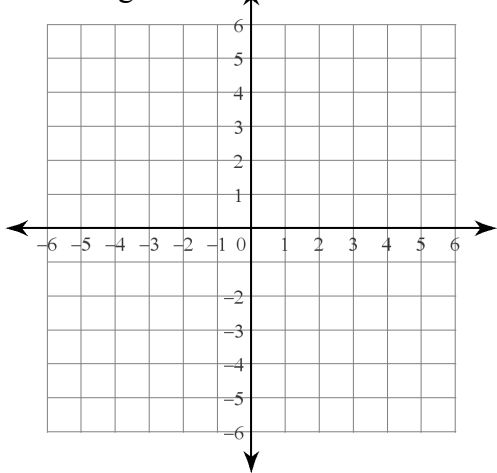
d) Reflect  $\triangle TAB$  if  $T(2,3)$ ,  $A(1,1)$ , and  $B(4,-3)$  over the y-axis, then translate the image by the rule  $(x,y) \rightarrow (x+2, y-1)$



$T'$ (\_\_\_\_,\_\_\_\_)  
 $A'$ (\_\_\_\_,\_\_\_\_)  
 $B'$ (\_\_\_\_,\_\_\_\_)

$T''$ (\_\_\_\_,\_\_\_\_)  
 $A''$ (\_\_\_\_,\_\_\_\_)  
 $B''$ (\_\_\_\_,\_\_\_\_)

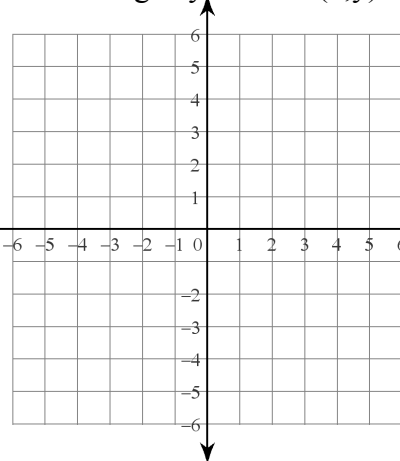
e) Rotate  $\triangle ALT$  if  $A(-5,-1)$ ,  $L(-3,-2)$ ,  $T(-3,2)$   $180^\circ$  clockwise about the origin, then reflect the image over the x-axis



$A'$  (\_\_\_\_,\_\_\_\_)  
 $L'$  (\_\_\_\_,\_\_\_\_)  
 $T'$  (\_\_\_\_,\_\_\_\_)

$A''$ (\_\_\_\_,\_\_\_\_)  
 $L''$ (\_\_\_\_,\_\_\_\_)  
 $T''$ (\_\_\_\_,\_\_\_\_)

f) Reflect  $\triangle TAB$  if  $T(2,3)$ ,  $A(1,1)$ , and  $B(4,-3)$  over the y-axis, then translate the image by the rule  $(x,y) \rightarrow (x+4, y-3)$



$T'$ (\_\_\_\_,\_\_\_\_)  
 $A'$ (\_\_\_\_,\_\_\_\_)  
 $B'$ (\_\_\_\_,\_\_\_\_)

$T''$ (\_\_\_\_,\_\_\_\_)  
 $A''$ (\_\_\_\_,\_\_\_\_)  
 $B''$ (\_\_\_\_,\_\_\_\_)