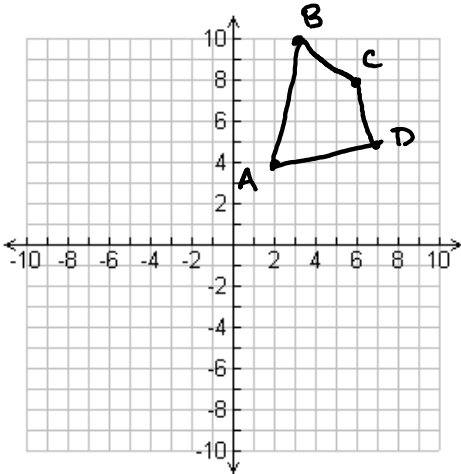
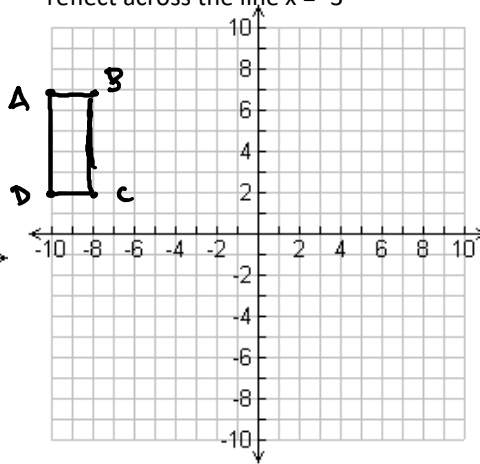


### Transformations – Challenge

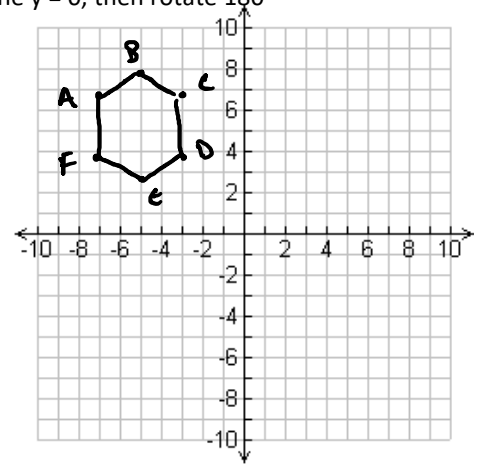
1) Reflect across the line  $y = 2$ , then translate by  $(x, y + 6)$



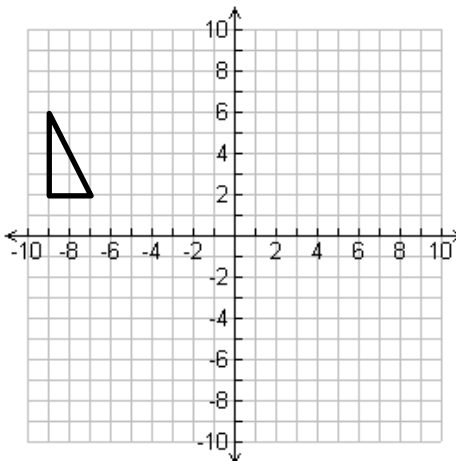
2) Translate by  $(x + 8, y - 1)$ , then reflect across the line  $x = -3$



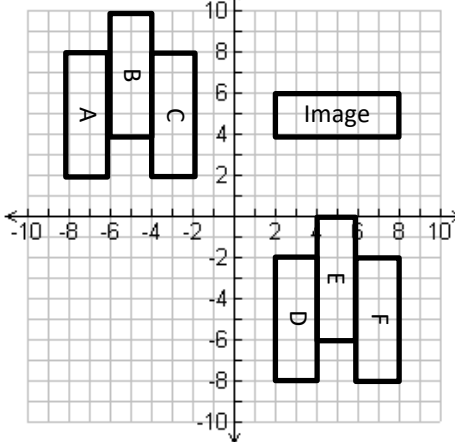
3) Reflect across the line  $x = 0$ , then across the line  $y = 0$ , then rotate  $180^\circ$



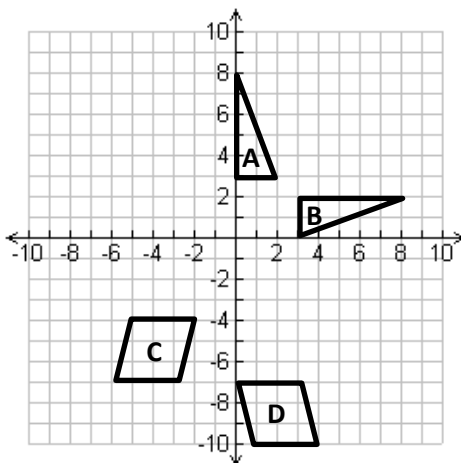
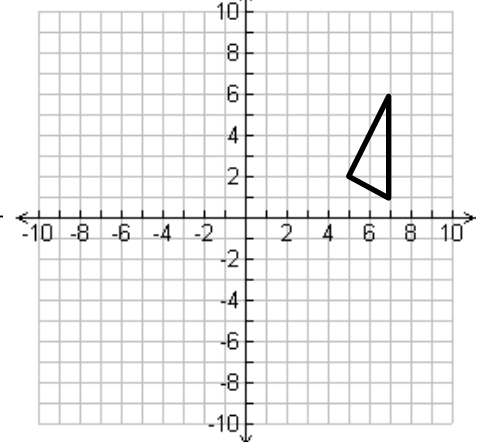
4) A triangle was rotated  $270^\circ$  clockwise, and the image is shown below. Draw the original figure.



5) A rectangle was translated left two units, then rotated  $90^\circ$  clockwise. The image is shown below. Which is the original figure?



6) A triangle was rotated  $180^\circ$ , then translated two units right and one unit up, then reflected across the x-axis. The image is shown. Draw the original figure.



7) Triangle **A** was transformed into triangle **B**. (See below)  
Which sequence of transformations was used?

- A.  $90^\circ$  clockwise rotation, then reflect across x-axis
- B.  $90^\circ$  clockwise rotation, then translate 2 units up
- C.  $90^\circ$  counterclockwise rotation, then reflect across the y-axis

8) What steps could I take to transform "C" onto "D"?