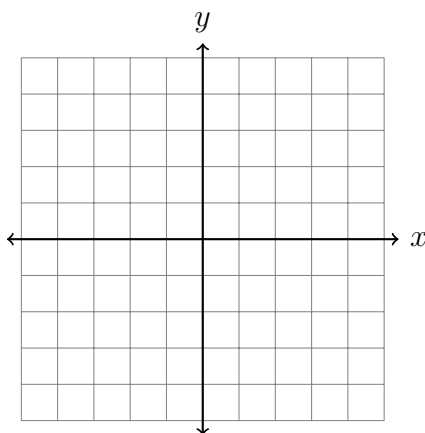
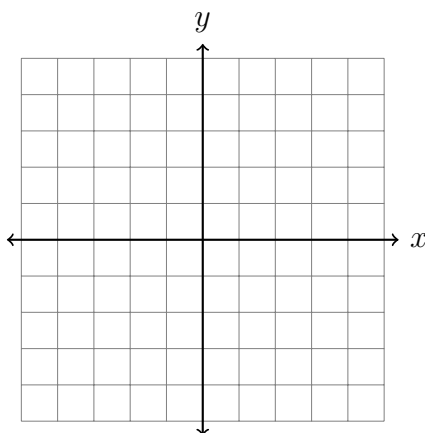


9-3bHW-Transformations

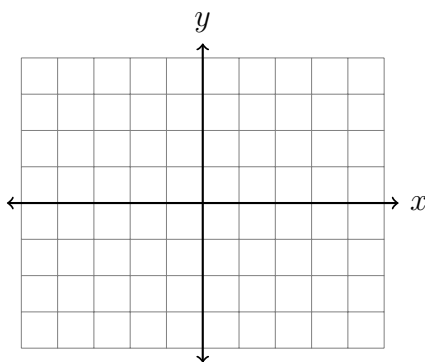
1. Apply the translation $(x, y) \rightarrow (x - 2, y + 4)$ to the point $A(2, -1)$.



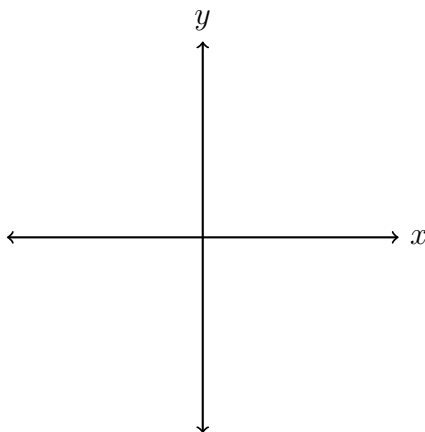
2. What is the image of $B(2, 4)$ under a reflection across the x -axis?



3. State the translation that would map $C(-3, 1)$ onto $C'(4, 0)$.



4. Given $D(1, 9) \rightarrow D'(4, 3)$. Find the image of $E(6, -2)$ with the translation.



5. The image of triangle ABC after a translation is $\triangle A'B'C'$. Is the area of the triangle greater, smaller, or the same after the translation? Justify your answer.

6. On the graph below, draw \overline{AB} , with $A(-2, 1)$ and $B(6, 3)$, labeling the end points. Determine and state the coordinates of the midpoint M of \overline{AB} and mark and label it on the graph.

