

Coordinate Grid Practice

Do you remember?

- When you move a point *up* in the coordinate grid, its y-coordinate is increased. The x-coordinate does not change.
- When you move a point *down* in the coordinate grid, its y-coordinate is decreased. The x-coordinate does not change.

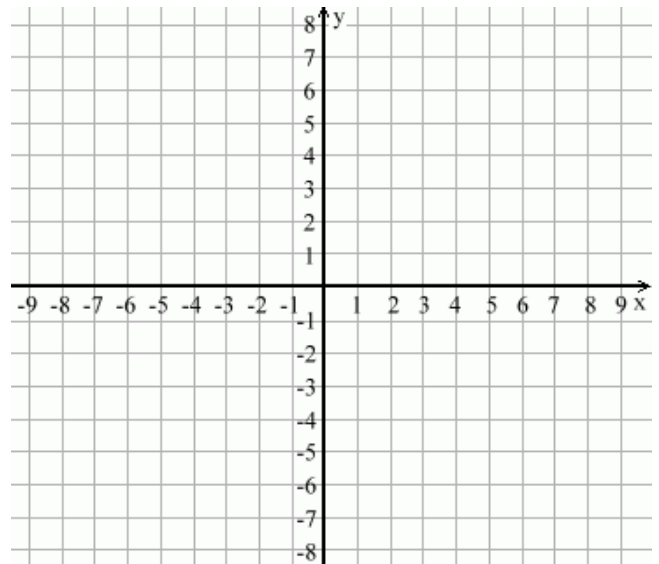
For example, to move the point $(-6, 5)$ four units up, we add four to the y-coordinate. The point becomes $(-6, 9)$.

Or, to move the point $(-6, 5)$ seven units down, we subtract seven from the y-coordinate. The point becomes $(-6, -2)$.

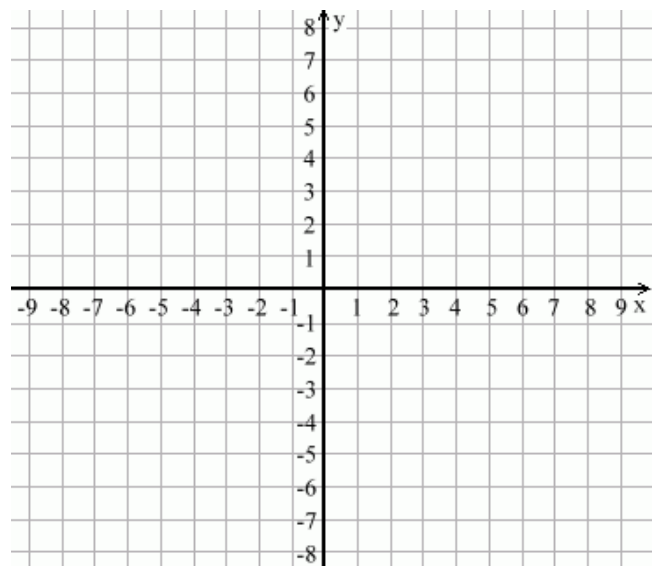
- a. The points $(-5, -2)$, $(-1, -7)$, and $(1, -6)$ are vertices of a triangle. Draw the triangle.

b. Move the triangle five units up (draw the new triangle). Write the coordinates of the moved vertices.

 $(-5, -2) \rightarrow (\quad , \quad)$
 $(-1, -7) \rightarrow (\quad , \quad)$
 $(1, -6) \rightarrow (\quad , \quad)$



- Andrew drew a secret figure, and then he moved it 8 units up. The vertices of the moved figure are now at: $(-4, 8)$, $(-6, 6)$, $(-4, 2)$, and $(1, 6)$. What were the coordinates of the original vertices?



- Two circles both have a radius of 1 unit. The center point of one is at $(8, 7)$ and of the other at $(5, 7)$.

Move both circles 9 units down. What are the center points of the new circles?