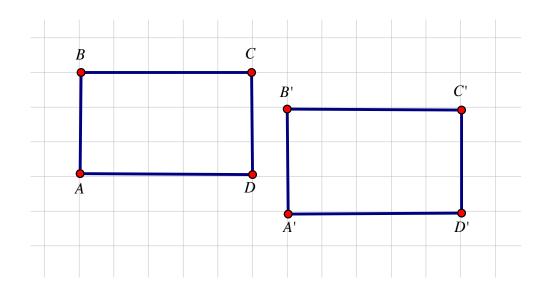
If we were not given a drawing, we might see this notation for a translation. The "a" moves the points P horizontally "a" and the "b" moves the points P vertically "b' units.

$$T_{(a,b)}(x, y) \longrightarrow (x + a, y + b)$$

Find the $T_{(3,-4)}(5,2)$

Under this translation, the point (5, 2) will move over 3 and down 4 to find the image. (5+3, 2+-4) = (8, -2)

Example 3 Find $T_{(6,-1)} \square ABCD$



Notice all the points, A, B, C, and D were moved 6 spaces to the right and 1 space down.