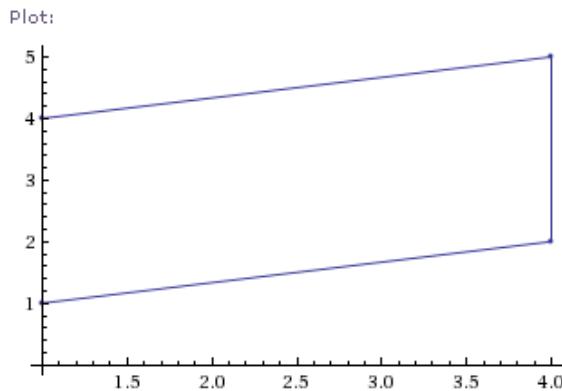


## Conditions

Given ABCD with  $A = (1,1)$ ,  $B = (4, 2)$ ,  $C = (4, 5)$ , and  $D = (1, 4)$ , what are the coordinates for Point  $D'$  if the y-axis is the reflecting line?

## Solution

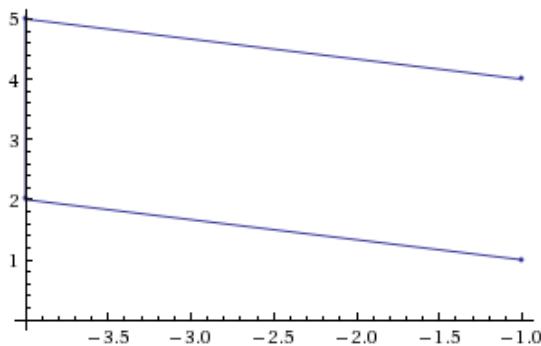
Consider the graph:



This is our quadrangle ABCD.

If y-axis is the reflecting line, then for all points of this quadrangle, y-coordinate will not change, x-coordinate changes its sign. That's why reflected figure will have the following coordinates:

$(1,1), (-4,2), (4,-5), (-1,4)$ , as shown on a graph below:



So, the coordinates of  $D'$  are  $(-1,4)$