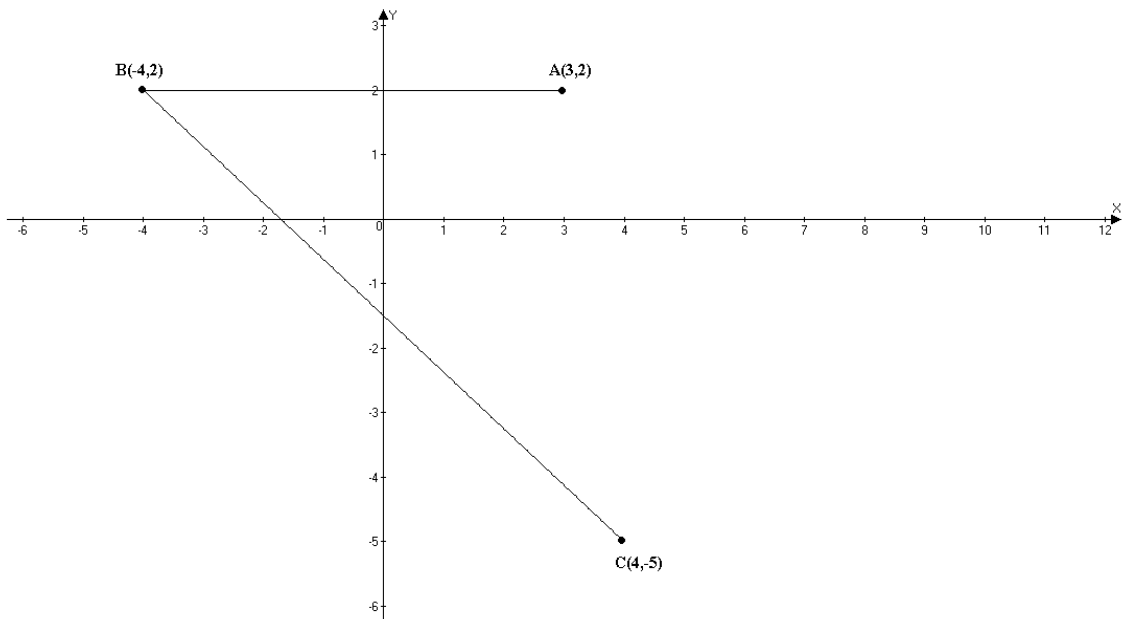


We have next picture of three vertices of the rectangle:

If we take $A = (3, 2)$, $B = (-4, 2)$ and $C = (4, -5)$, then:



Then we can see that it will be parallelogram and we can find vertices D:

Line AD will be parallel to line BC and AB will be parallel to the line CD. So, we can find:

$$AB: y = 2, \quad -4 \leq x \leq 3$$

$$BC: \frac{x+4}{8} = \frac{y-2}{-7} \Rightarrow y = -\frac{7}{8} \cdot x - \frac{3}{2}$$

So we have that line CD has equation $y = c$, where $c = \text{const}$ and going through the point $C = (4, -5)$. So, we can say that line CD has equation: $y = -5$.

The line AD has equation $y = -\frac{7}{8} \cdot x + c$, where $c = \text{const}$ and going through the point

$A = (3, 2)$. So: $y(3) = -\frac{7}{8} \cdot 3 + c = 2 \Rightarrow c = 2 + \frac{21}{8} = \frac{37}{8}$ and line AD has equation:

$$y = -\frac{7}{8} \cdot x + \frac{37}{8}.$$

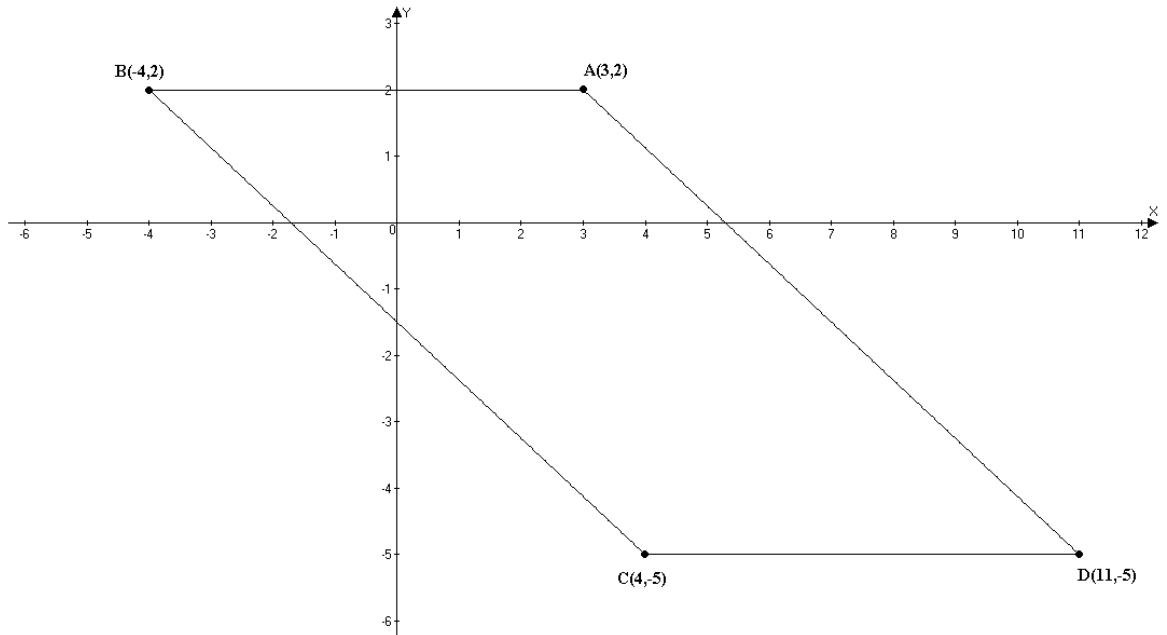
And we can find point D:

$AD \cap CD:$

$$y = -\frac{7}{8} \cdot x + \frac{37}{8} = -5 \Rightarrow -\frac{7}{8} \cdot x = -\frac{77}{8} \Rightarrow x = 11, y = -5 \Rightarrow$$

$$\Rightarrow D = (11, -5)$$

And we have such rectangle:



Answer: $D = (11, -5)$.