Eva is drawing a trapezium.
She wants her final shape to look like this:


Eva uses the coordinates $(2,4),(4,5),(1,6)$ and $(5,6)$.
Will she draw the shape that she wants to?
If not, can you correct her coordinates?

Mo has written the coordinates of points $\mathrm{A}, \mathrm{B}$ and C .
A (I, I)
B (2, 7)
C $(3,0)$

Mark Mo's work and correct his mistakes.


Explain why Mo could not make the same mistake for point A as he made for points B and C .

The diagram shows two identical triangles.
The coordinates of three points are shown.
Find the coordinates of point $A$.


A is the point $(0,-10)$
$B$ is the point $(8,0)$
The distance from $A$ to $B$ is two thirds of the distance from $A$ to $C$.
Find the coordinates of $C$.


## True or False?

Dexter has translated the rectangle ABCD 6 units down and I unit to the right to get to the yellow rectangle.


Explain your reasoning.

Rectangle ABCD is the result of a rectangle being reflected in either the $x$ - or the $y$-axis.
Where could the original rectangle have been? Draw the possible original rectangles on the coordinate grid, and label the coordinates of each vertex.


## Annie has reflected the shape in the

 $y$-axis.Is her drawing correct?
If not explain why.


