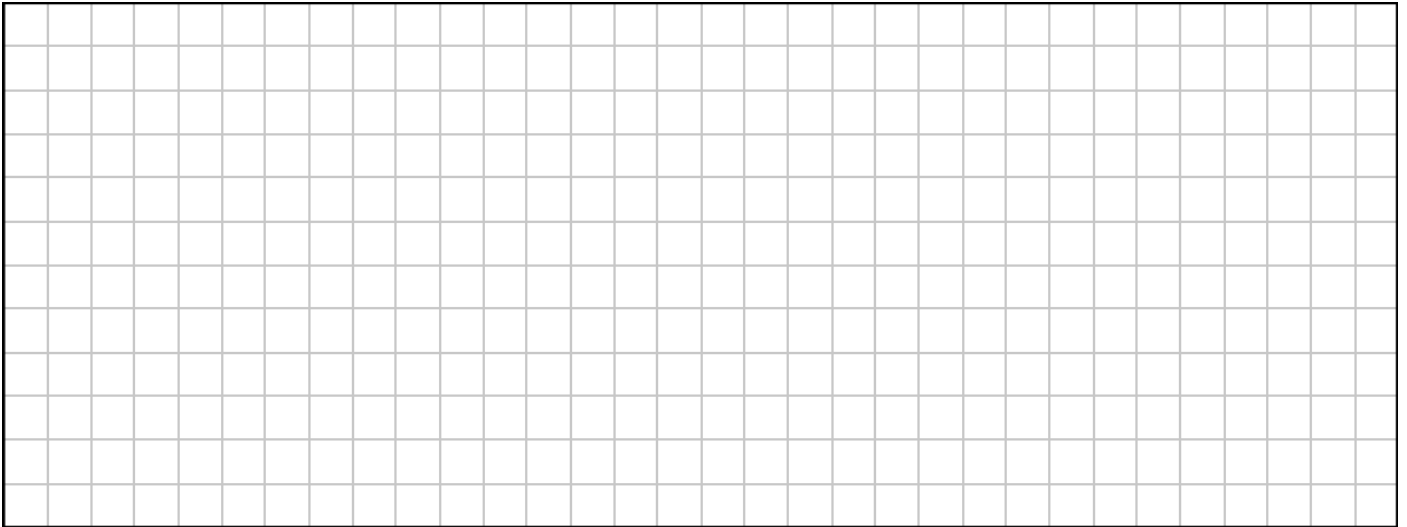


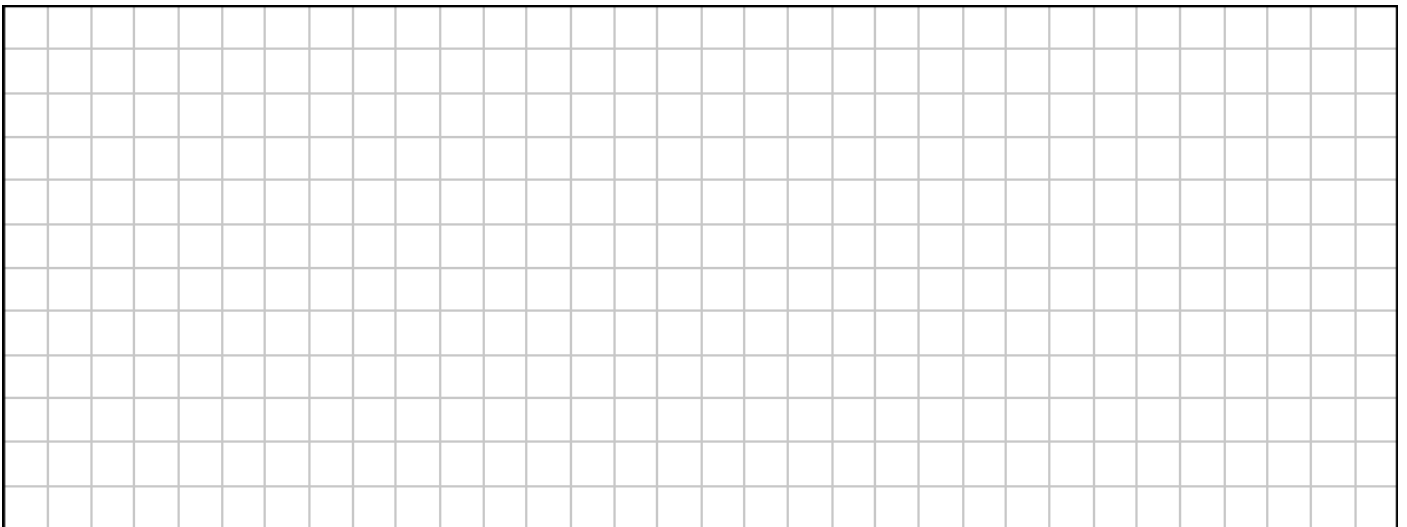
2024 LCHL PAPER 2 Q6

This section is to be completed having corrected the question. **Enter your score in the box above ↑.**

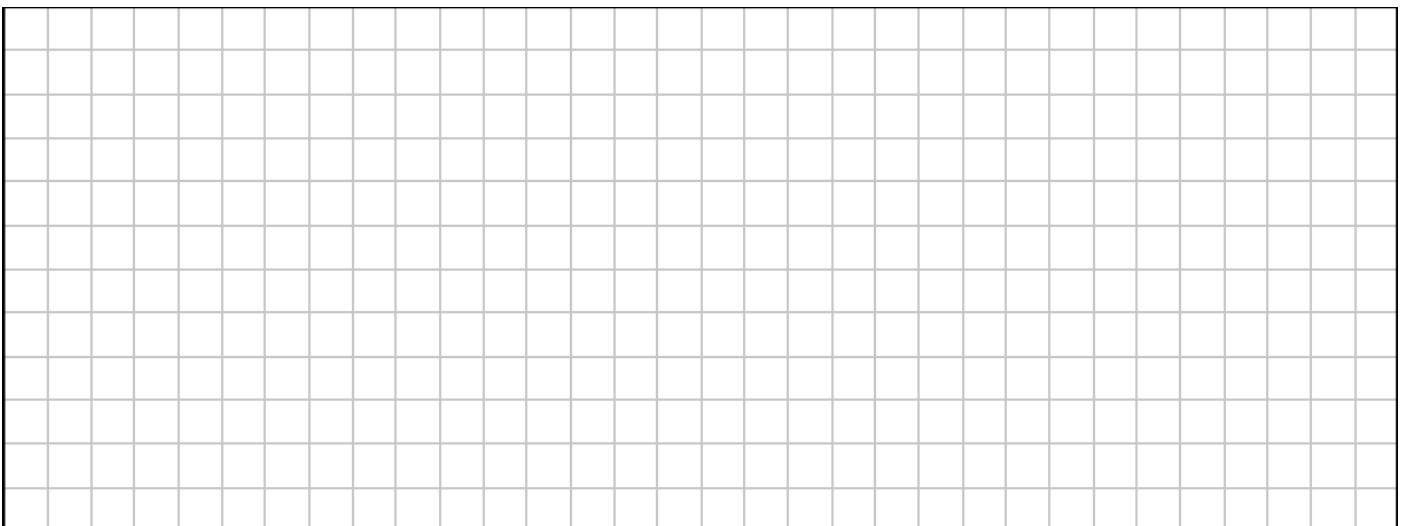
Thoughts (Easy/ Hard, State the Topic, Links to other Topics, Similar Questions?)



What formulae or rules did I need? Is there anything I should learn off?

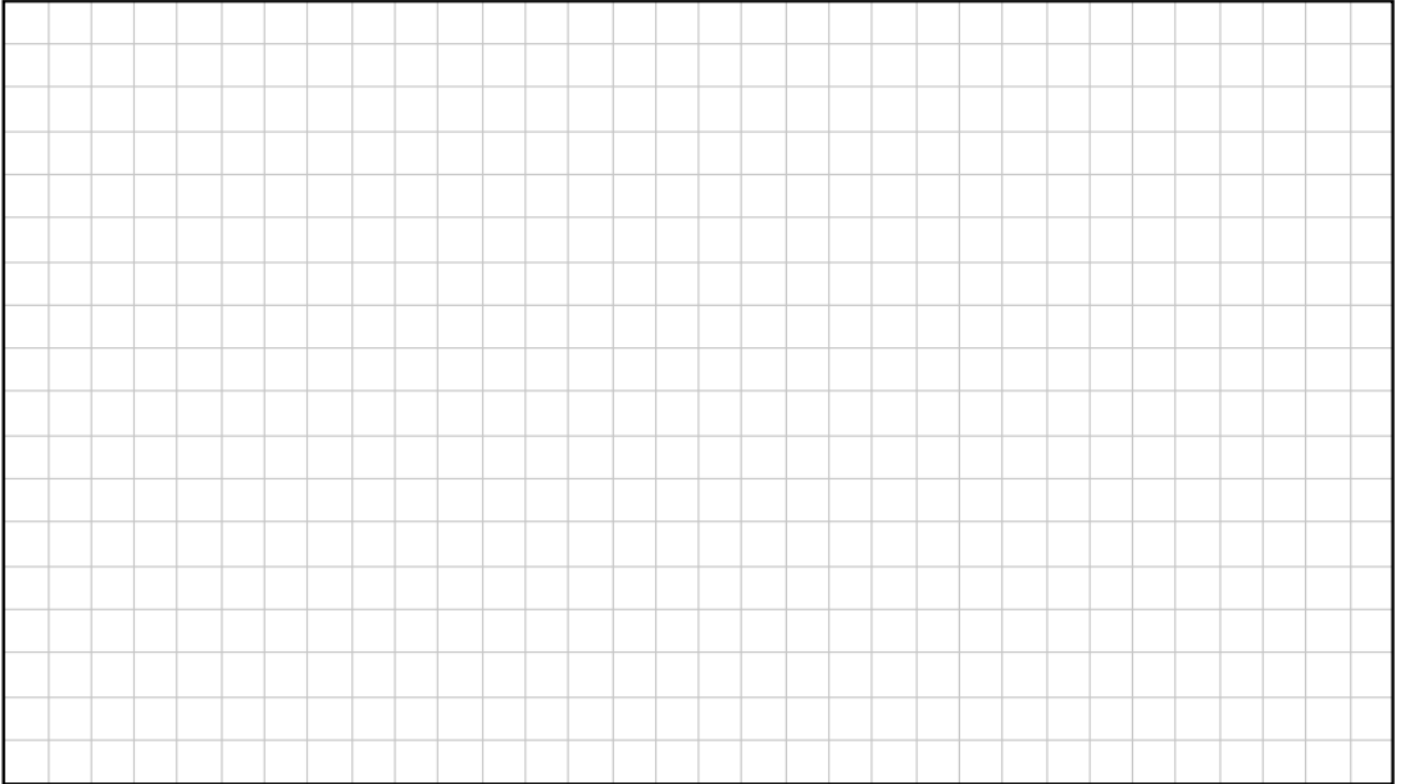


Is there anything I still don't understand? What do I need to revise? Should I return to this question?



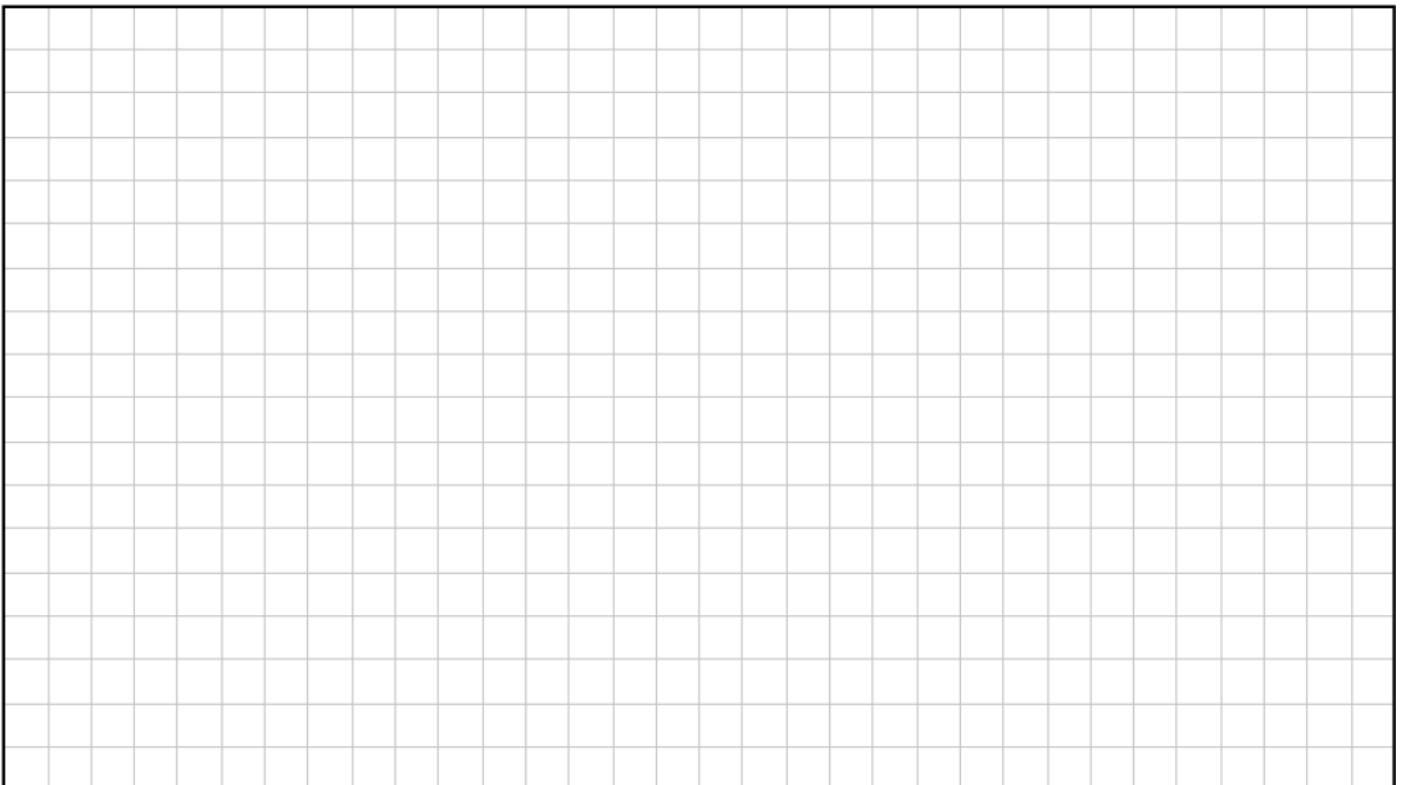
► 2024 LCHL Paper 1 – Question 6

- (a) $[AB]$ is a line segment.
The point $C(6, 11)$ divides the line segment $[AB]$ internally in the ratio $1 : 3$.
 A is the point $(1, 13)$.
Find the co-ordinates of the point B .



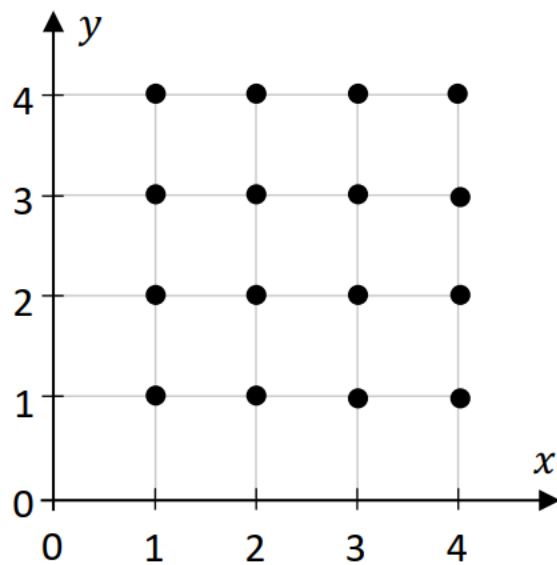
- (b) Find the perpendicular distance from the point $(5, -2)$ to the line:

$$y = \frac{4}{3}x - 11$$



(c) In the co-ordinate diagram below, 16 points are marked with a dot (\bullet).

These are all of the points of the form (m, n) , where $m, n \in \mathbb{N}$ and $m, n \leq 4$.



A pair of these points is picked at random.

(i) How many different pairs of points can be picked from these 16 points?

(ii) The two points that are picked are joined with a straight line.
Find the **probability** that this line is horizontal.