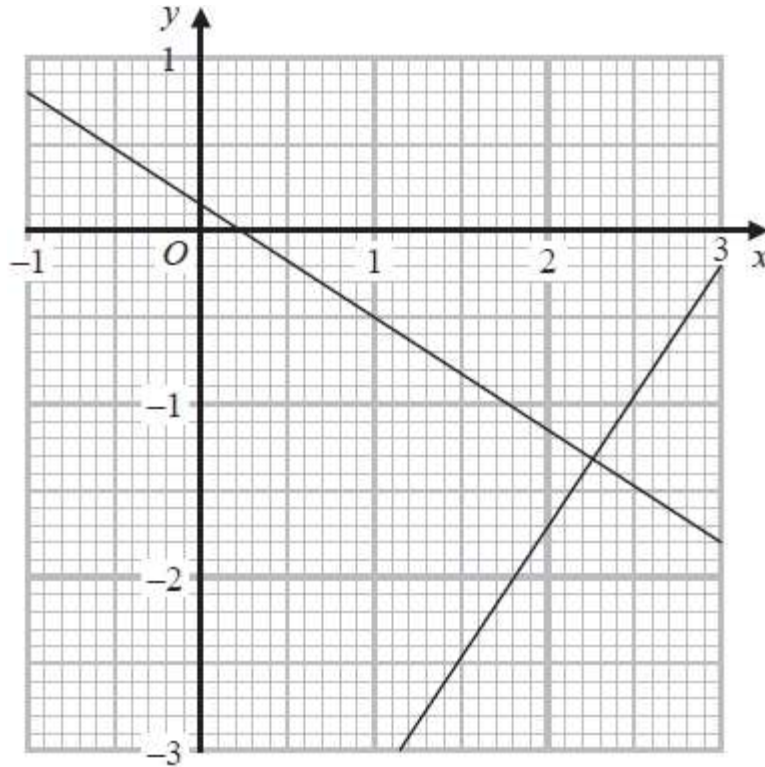


GCSE QUESTIONS

Q1. NON-CALCULATOR

The graphs with equations $3y + 2x = \frac{1}{2}$ and $2y - 3x = -\frac{113}{12}$ have been drawn on the grid below.



Using the graphs, find estimates of the solutions of the simultaneous equations

$$3y + 2x = \frac{1}{2}$$

$$2y - 3x = -\frac{113}{12}$$

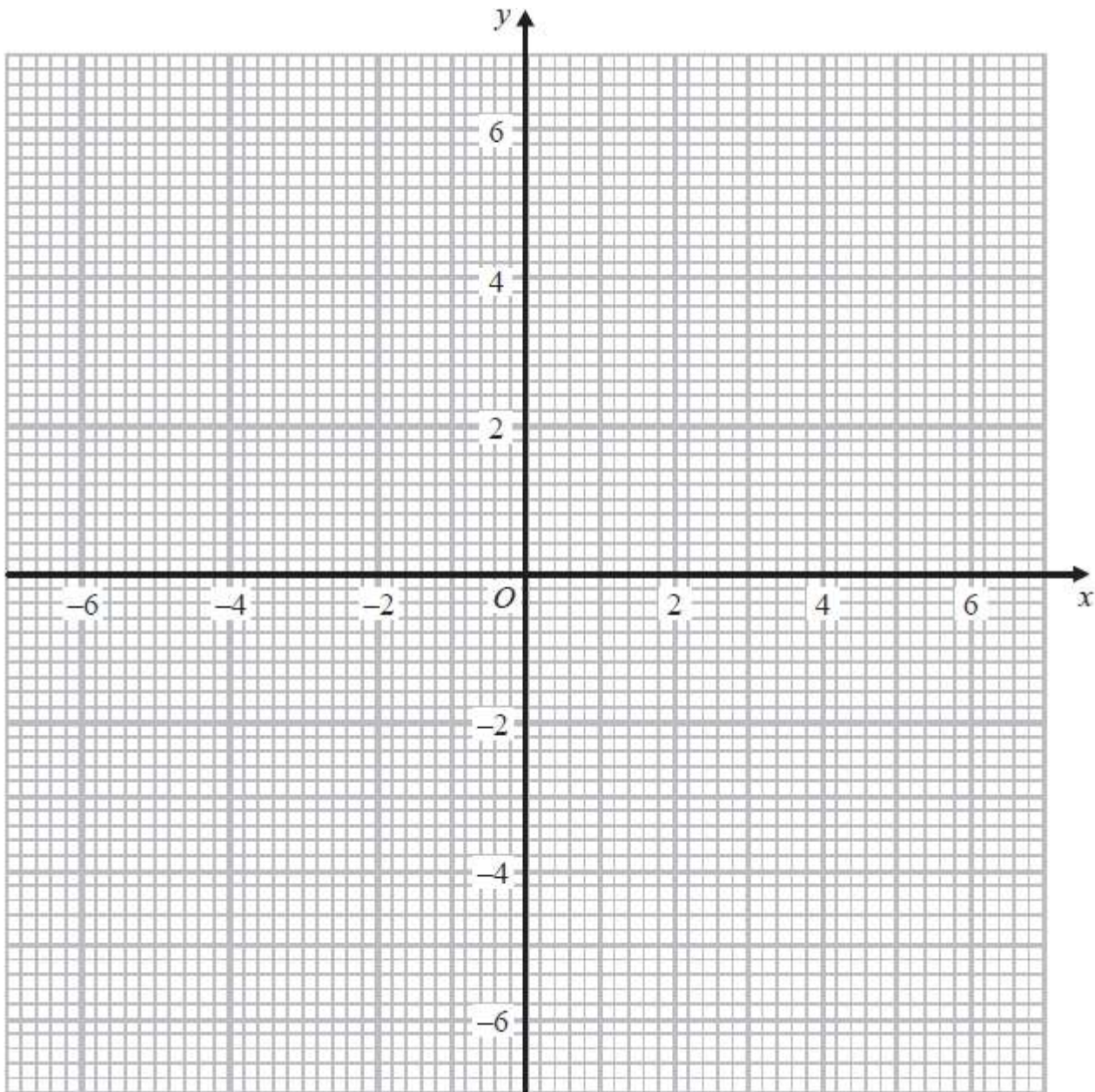
$x =$

$y =$

(Total for question = 2 marks)

Q2. CALCULATOR ALLOWED

(a) On the grid, draw the graph of $x^2 + y^2 = 12.25$



(2)

(b) Hence find estimates for the solutions of the simultaneous equations

$$\begin{aligned} x^2 + y^2 &= 12.25 \\ 2x + y &= 1 \end{aligned}$$

(3)

(Total for question = 5 marks)