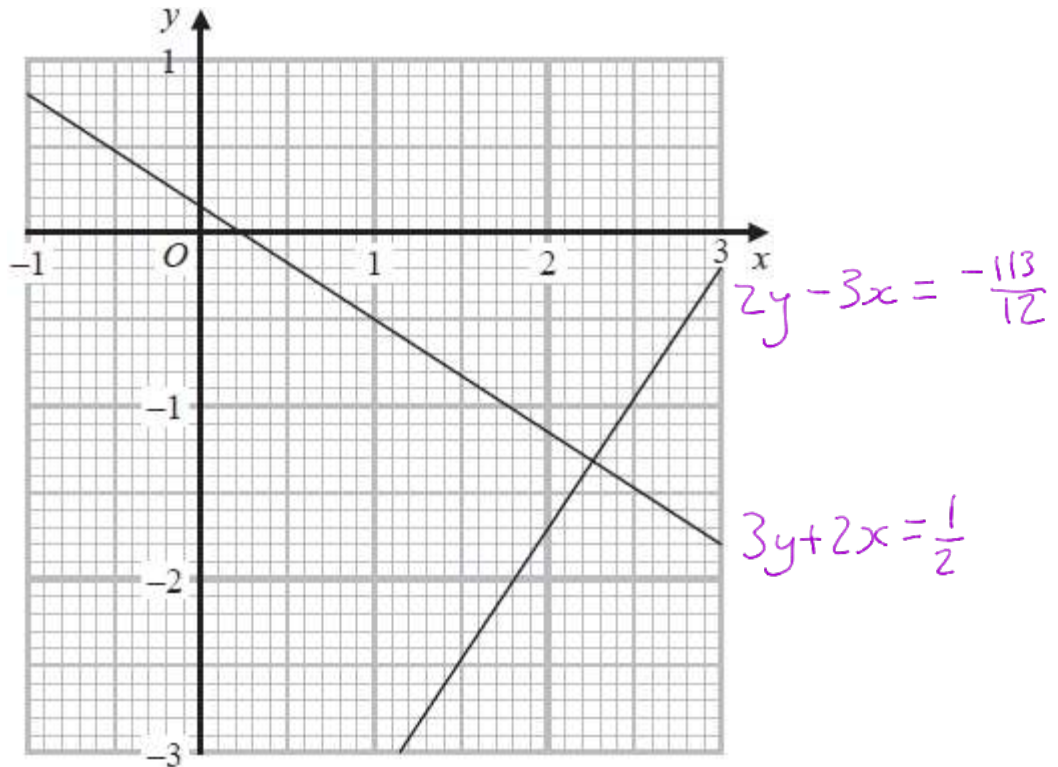


GCSE QUESTIONS WITH CLUES

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

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

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

$x = \dots\dots\dots$

$y = \dots\dots\dots$

(Total for question = 2 marks)

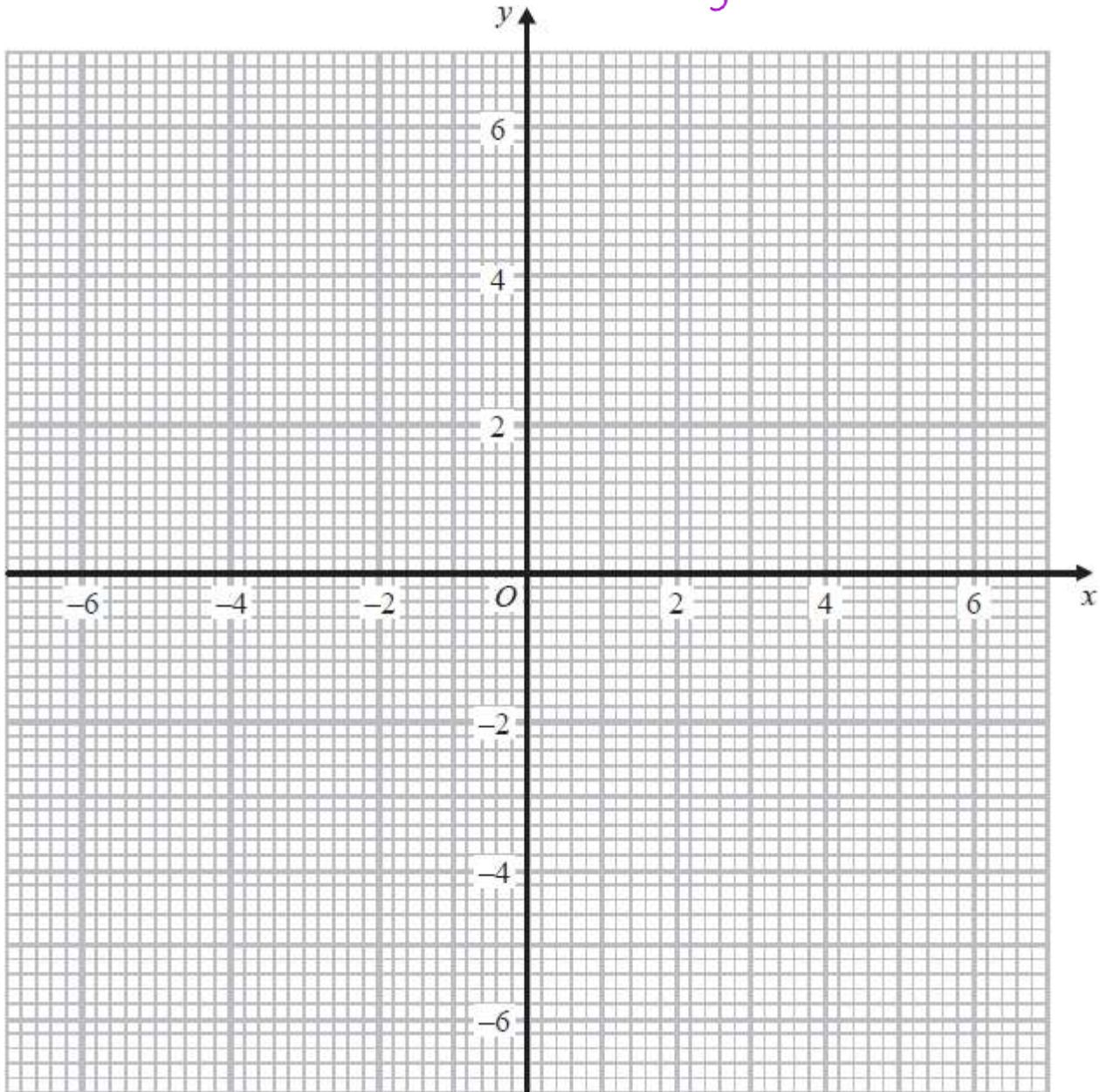
what coordinates are the same for both lines?

Q2. CALCULATOR ALLOWED

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

Equation of a circle

$$x^2 + y^2 = \text{radius}^2$$



(2)

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

$$x^2 + y^2 = 12.25$$

$$2x + y = 1$$

$$y = -2x + 1$$

(3)

(Total for question = 5 marks)