Solving Simultaneous Equations Graphically

Question Paper

Level	GCSE
Subject	Maths
Exam Board	Edexcel GCSE
Topic	Solving Simultaneous Equations Graphically
Grade Level	Grade 5
Booklet	Question Paper

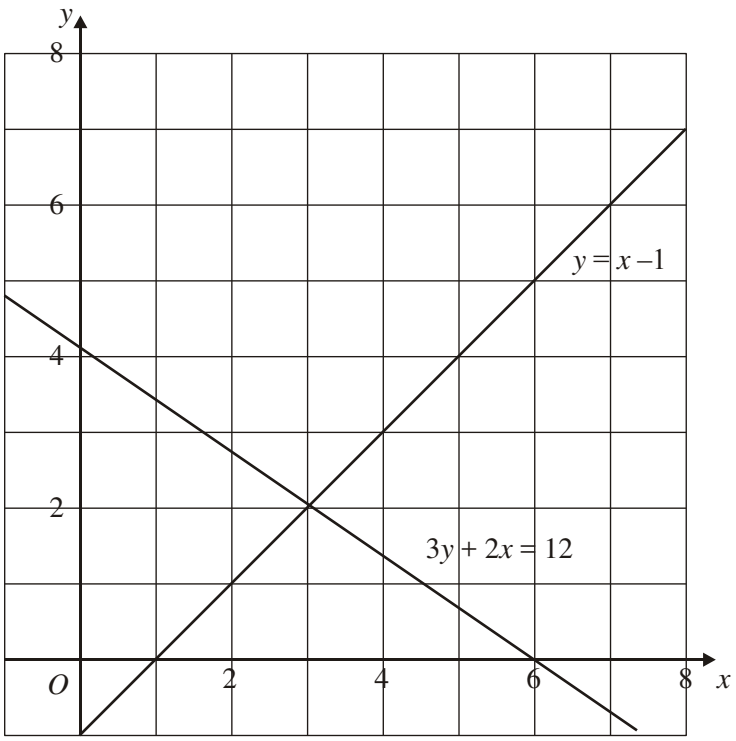
Time Allowed: **16 minutes**

Score: **/13**

Percentage: **/100**

Grade Boundaries:

1. The graphs of the straight lines with equations $3y + 2x = 12$ and $y = x - 1$ have been drawn on the grid.



Use the graphs to solve the simultaneous equations

$3y + 2x = 12$
$y = x - 1$

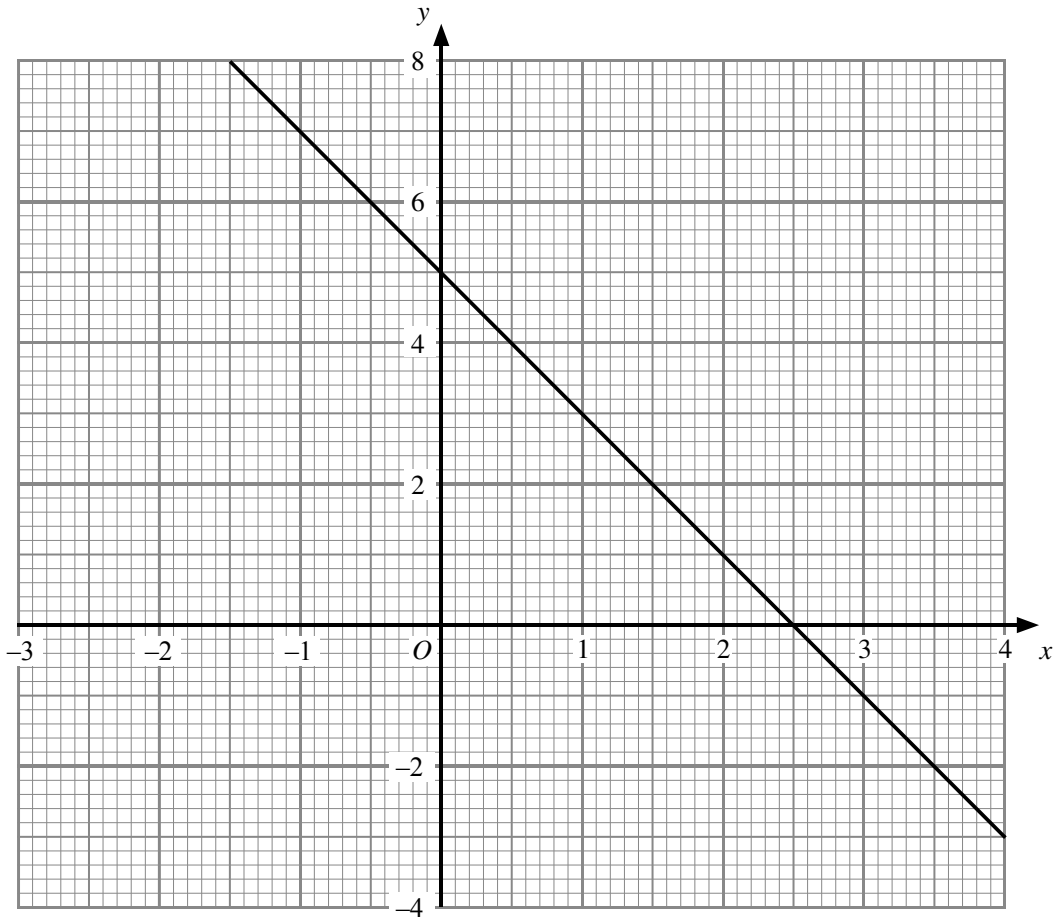
x = ...

y = ...

(2)

(Total 2 marks)

2. The straight line $y + 2x = 5$ has been drawn on the grid.



(a) Complete this table of values for $y = 2x - 1$

x	–1	0	1	2	3	4
y		–1		3	5	

(2)

(b) On the grid, draw the graph of $y = 2x - 1$

(2)

(c) Use your diagram to solve the simultaneous equations

$y + 2x = 5$

$y = 2x - 1$

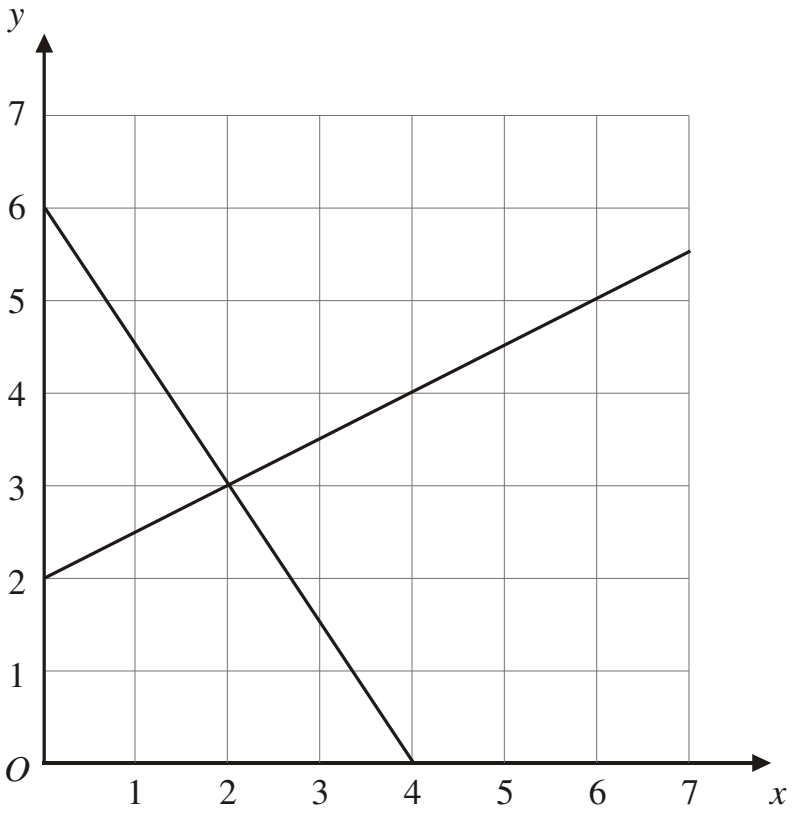
$x =$ .....

$y =$ .....

(2)

(Total 6 marks)

3.



The diagram shows graphs of $y = \frac{1}{2}x + 2$

and $2y + 3x = 12$

(a) Use the diagram to solve the simultaneous equations

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

$2y + 3x = 12$

$x =$ ..... $y =$ .....

(2)

(Total 2 marks)

4.

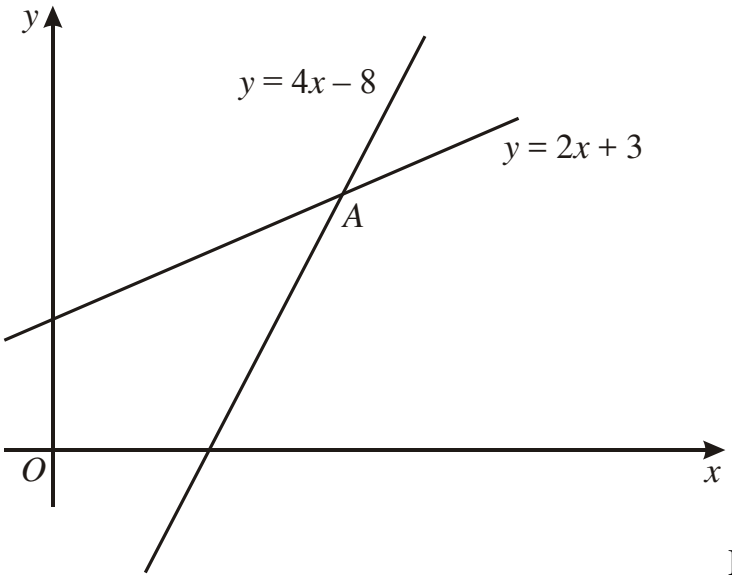


Diagram **NOT** accurately drawn

The diagram shows two straight lines intersecting at point A.
The equations of the lines are

$y = 4x - 8$
$y = 2x + 3$

Work out the coordinates of A.

(....., ...)

(Total 3 marks)