Name: _____

ASM Tuition Academy

Solving Simultaneous Equations Graphically

Instructions:

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
  - There may be more space than you need.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all you're working out.**

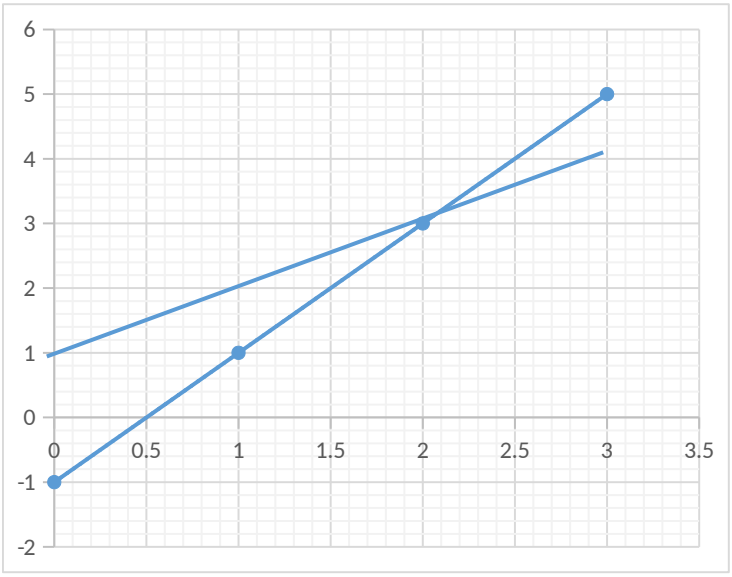
Information:

- The marks for each question are shown in brackets
  - use this as a guide as to how much time to spend on each question.

Advice:

- Read each question carefully before you start to answer it.
- Keep an eye on time.
- Try to answer every question.
- Check your answers if you have time at the end.

1. **The graph of the straight line with equations y = x + 1 and y = 2x -1 have been drawn on the grid.**



Use the graph to solve the simultaneous equations.

y = x + 1

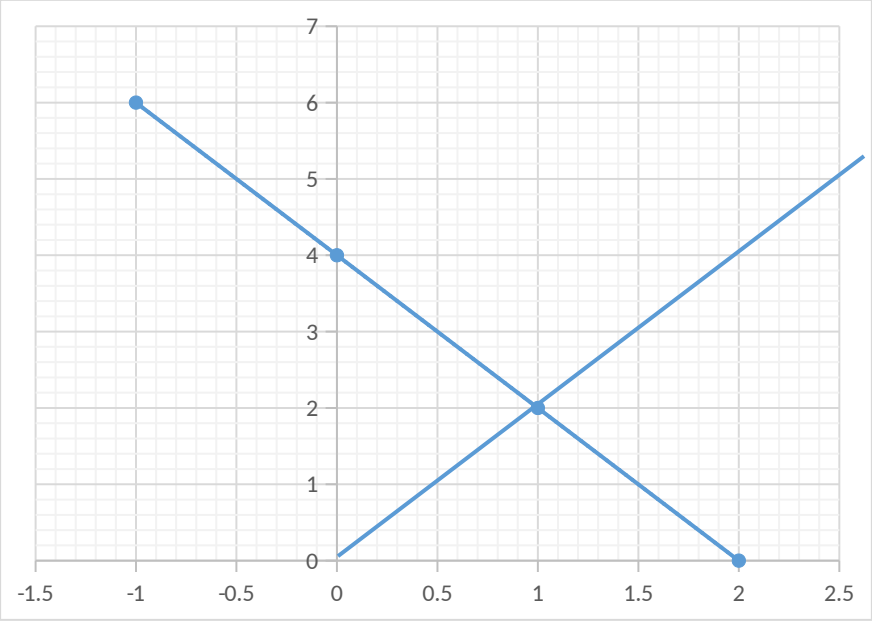
y = 2x - 1

x = ……...

y = ……..

(Total for question 1 is 2 marks)

2. The graph of the straight line with equations y = 2x and y + 2x = 4 have been drawn on the grid.



Use the graph to solve the simultaneous equations.

y = 2x

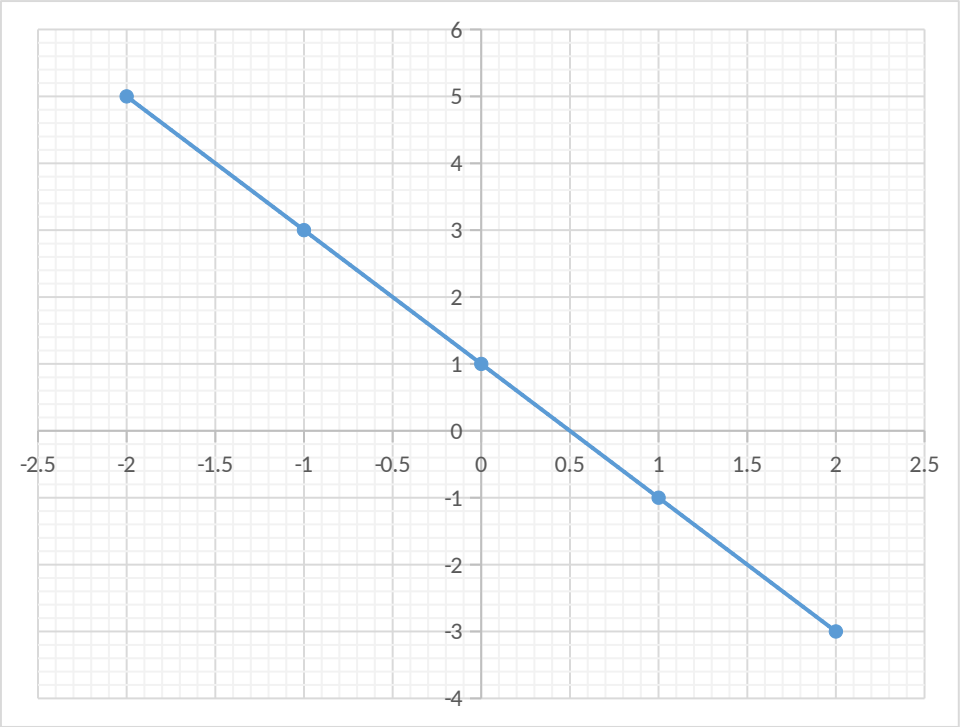
y + 2x = 4

x = ...

y = ...

(Total for question 2 is 2 marks)

3. The graph of y = -2x + 1 is drawn on the grid.



a) On the grid, draw the graph of y = x + 4

b) Use the graph to solve the simultaneous equations

y = -2x + 1

y = x + 4

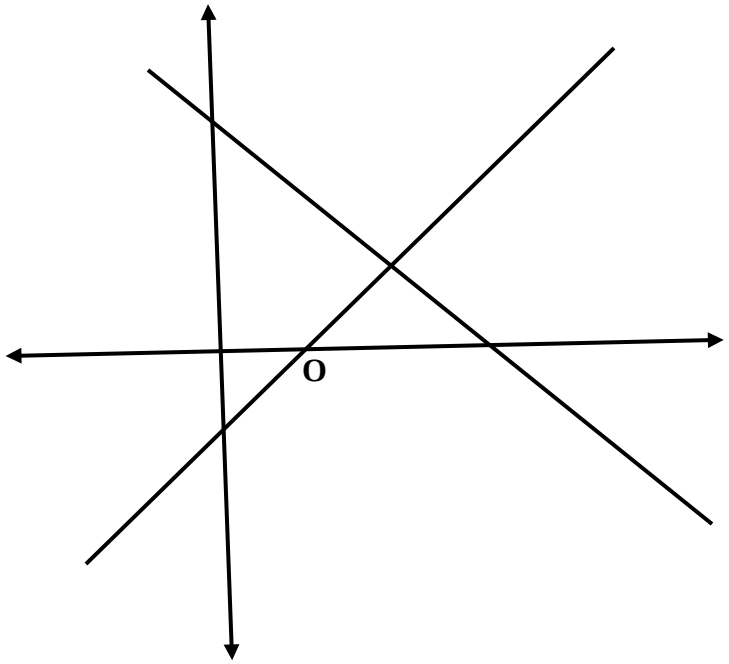
x = ……

y = ……

(Total for question 3 is 4 marks)

4. The diagram shows two straight lines.
The equation of these lines are y = 2x – 3 and y = (-2 / 3) x + 5.

Work out the coordinates of the points where the line intersect.



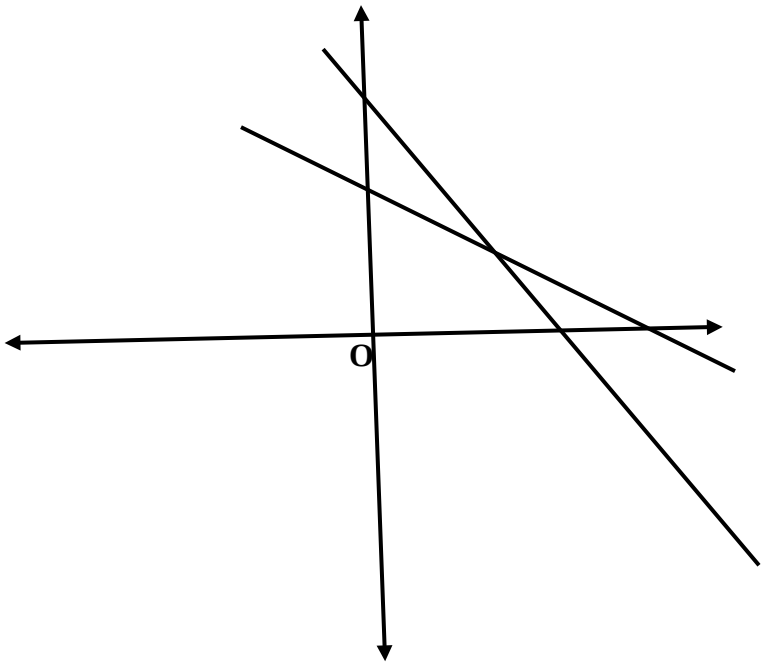
x = …….

y = …….

(Total for question 4 is 3 marks)

5. The diagram shows two straight lines.
The equation of these lines are y = - (2 / 3) x + 4 and y = - (5 / 3) x + 7.

Work out the coordinates of the points where the line intersect.



x = …….

y = …….

(Total for question 5 is 3 marks)