



SCAN ME

Equation of a Line



SCAN ME

REVISE THIS TOPIC

CHECK YOUR ANSWERS

1 (a) Write down the coordinates of the y -intercept of the line $y = 2x - 3$ [1 mark]

Answer (_____ , _____)

1 (b) Write down the gradient of the line $y = 2x - 3$ [1 mark]

Answer _____

2 (a) Write down the coordinates of the y -intercept of the line $y = 8 - 5x$ [1 mark]

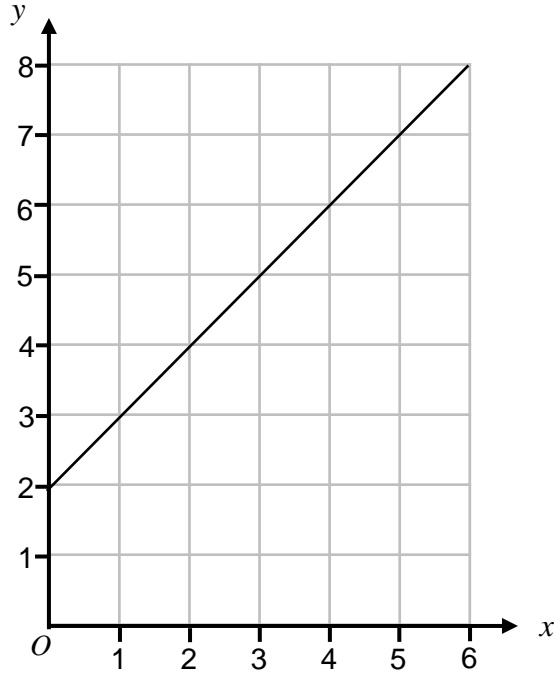
Answer (_____ , _____)

2 (b) Write down the gradient of the line $y = 8 - 5x$ [1 mark]

Answer _____



3 Here is a straight line graph.



3 (a) Write down the coordinates of the y -intercept

[1 mark]

Answer (_____ , _____)

3 (b) Work the gradient of the line.

[2 marks]

Answer _____

3 (c) Use your answers to parts (a) and (b) to write down the equation of the line.

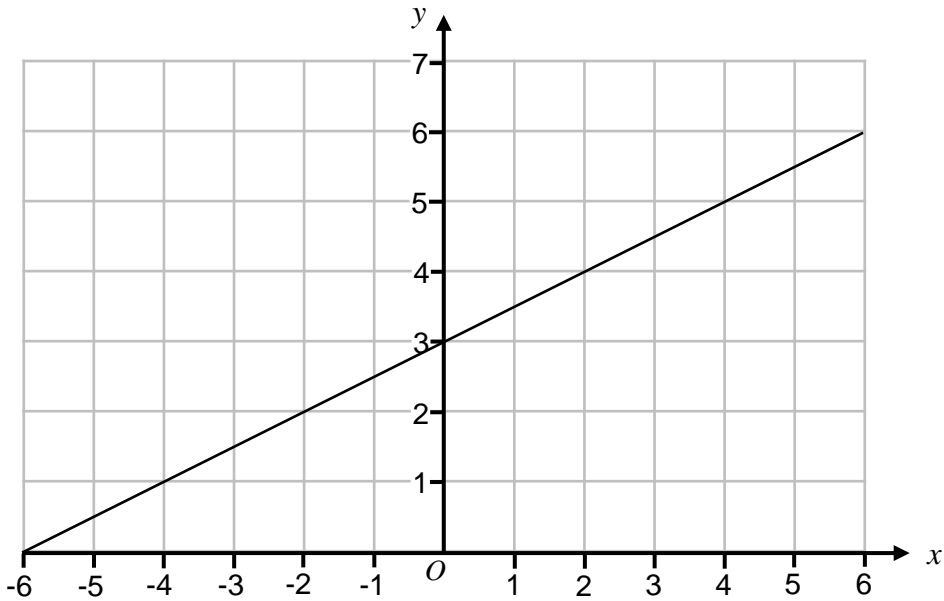
[1 mark]

Give your answer in the form $y = mx + c$

Answer _____



4 Here is a straight line graph.



4 (a) Write down the coordinates of the y -intercept [1 mark]

Answer (_____ , _____)

4 (b) Work the gradient of the line. [2 marks]

Answer _____

4 (c) Use your answers to parts (a) and (b) to write down the equation of the line. [1 mark]

Give your answer in the form $y = mx + c$

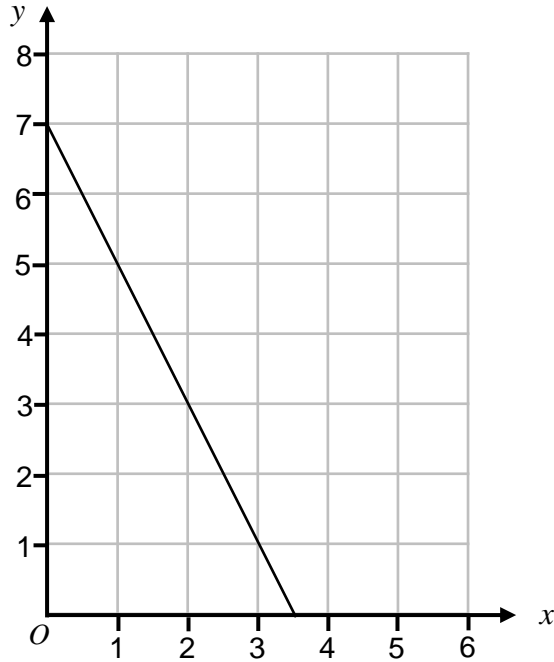
Answer _____

$\frac{\quad}{8}$

Turn over ►



5 Here is a straight line graph.



5 (a) Write down the coordinates of the y -intercept

[1 mark]

Answer (_____ , _____)

5 (b) Work the gradient of the line.

[2 marks]

Answer _____

5 (c) Use your answers to parts (a) and (b) to write down the equation of the line.

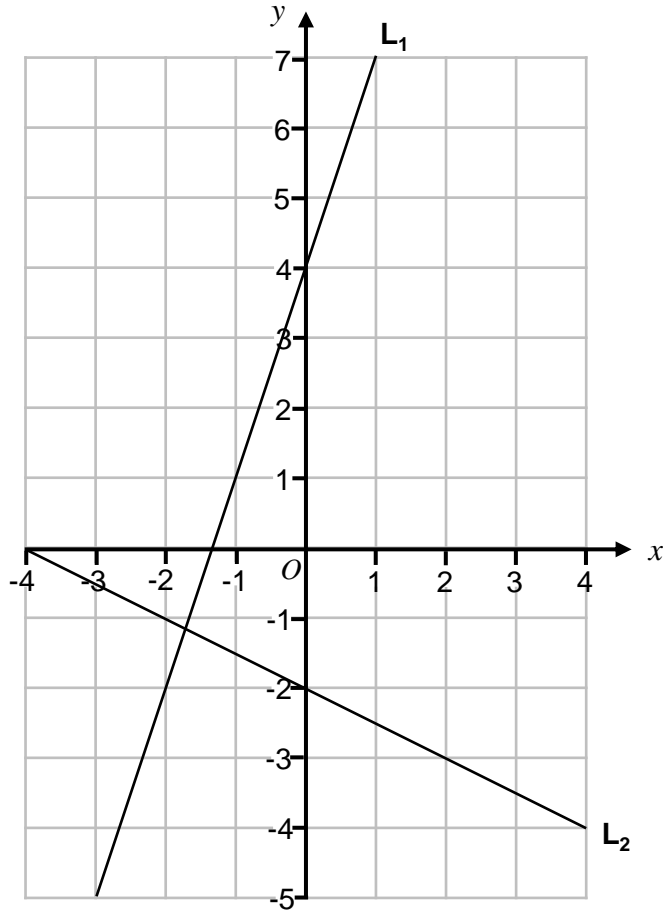
[1 mark]

Give your answer in the form $y = mx + c$

Answer _____



6 The lines L_1 and L_2 are shown on the grid.



6 (a) Work out the equation of line L_1 [3 marks]

Answer _____

6 (b) Work out the equation of line L_2 [3 marks]

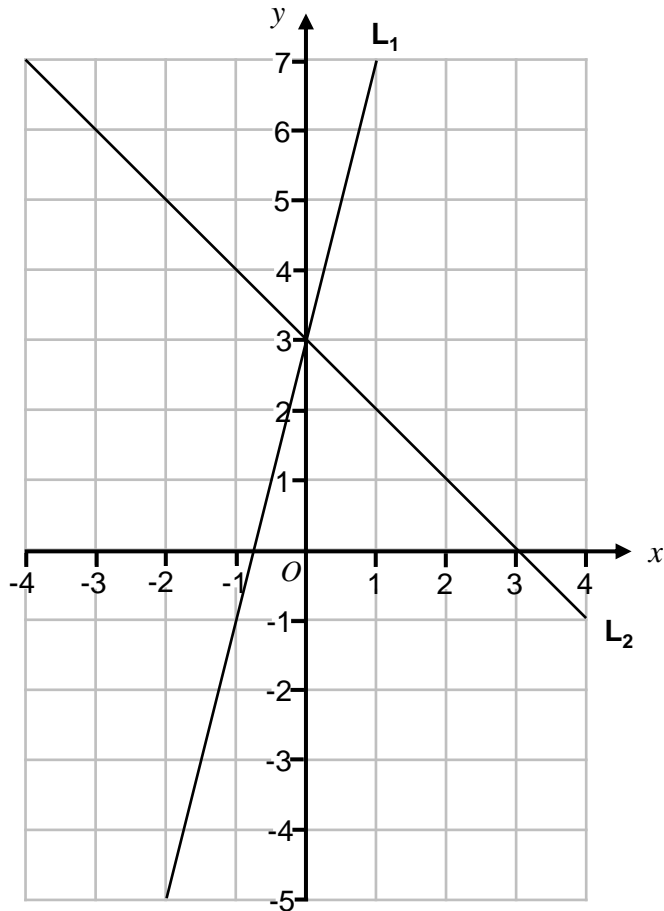
Answer _____

$\frac{\quad}{10}$

Turn over ►



7 The lines L_1 and L_2 are shown on the grid.



7 (a) Work out the equation of line L_1 [3 marks]

Answer _____

7 (b) Work out the equation of line L_2 [3 marks]

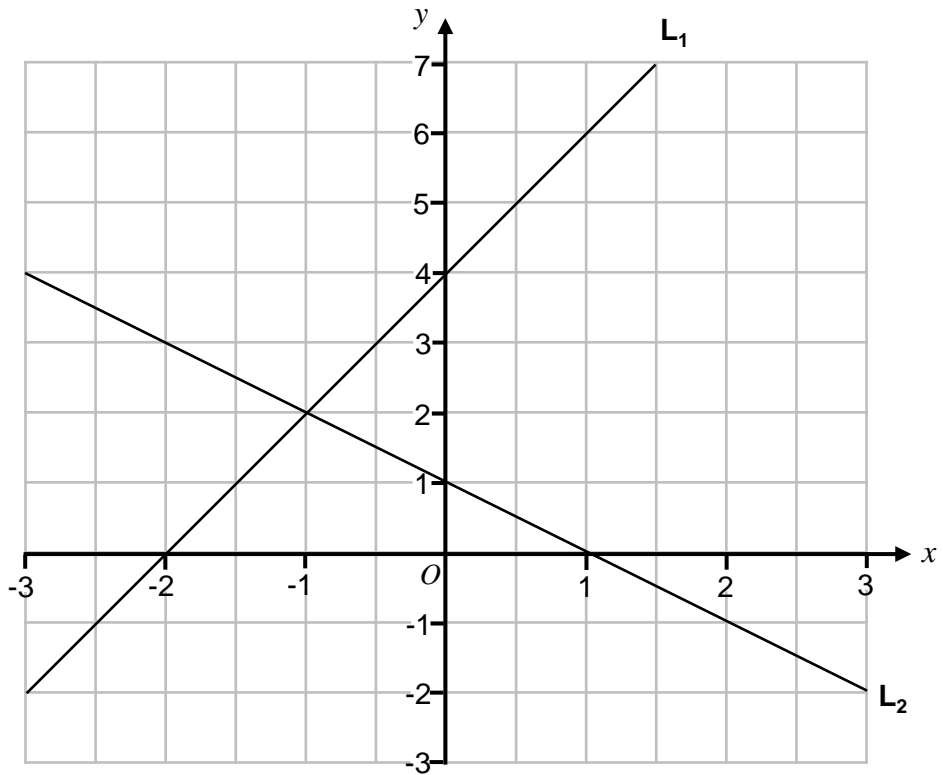
Answer _____



Turn over ►



8 The lines L_1 and L_2 are shown on the grid.



8 (a) Work out the equation of line L_1 [3 marks]

Answer _____

8 (b) Work out the equation of line L_2 [3 marks]

Answer _____

12

Turn over ►





9 (a) Write down the coordinates of the y -intercept of the line $2y = 5x + 6$ [1 mark]

Answer (_____ , _____)

9 (b) Write down the gradient of the line $2y = 5x + 6$ [1 mark]

Answer _____

9 (c) Is the point $(2, 8)$ on the line $2y = 5x + 6$?
You **must** show your working. [2 marks]

10 (a) Write down the coordinates of the y -intercept of the line $y - 3x = 10$ [1 mark]

Answer (_____ , _____)

10 (b) Write down the gradient of the line $y - 3x = 10$ [1 mark]

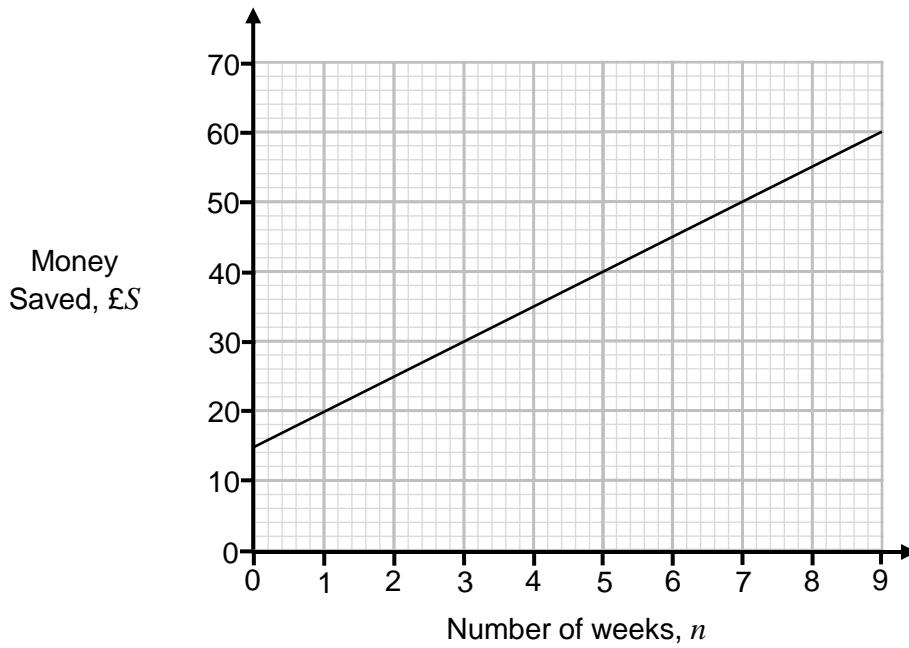
Answer _____

10 (c) Is the point $(4, -2)$ on the line $y - 3x = 10$
You **must** show your working. [2 marks]





11 The graph shows the amount of money saved by a student.



Work out a formula for S in terms of n .

[3 marks]

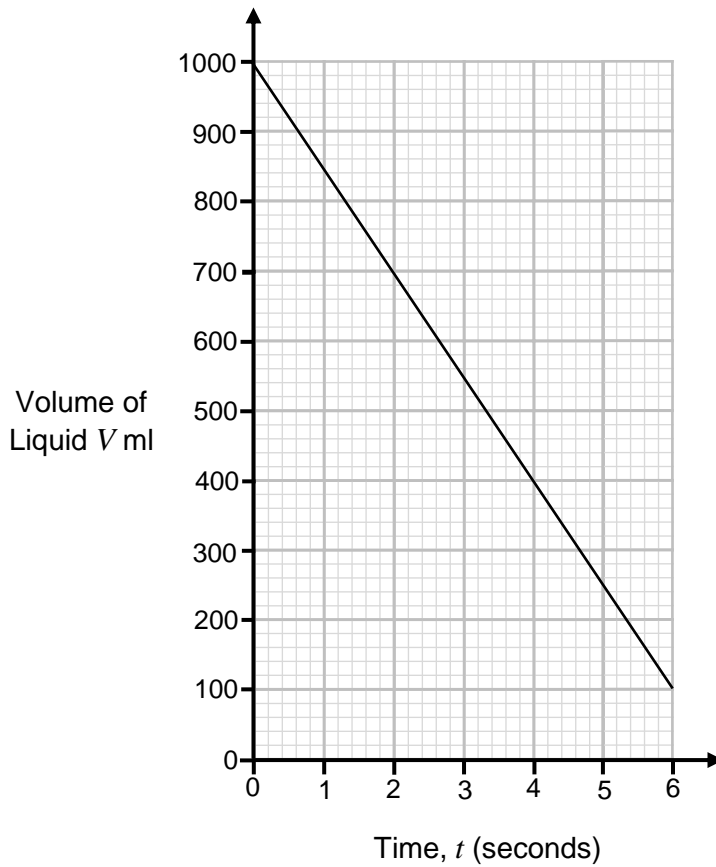
Answer _____



Turn over ►



12 The graph shows the amount liquid in a container.



Work out a formula for V in terms of t .

[3 marks]

Answer _____





13 Work out the gradient of the straight line through (2, 8) and (5, 20) [2 marks]

Answer _____

14 Work out the gradient of the straight line through (2, 10) and (6, 8) [2 marks]

Answer _____

15 A straight line

has gradient 4
and
passes through the point (3, 10)

Work out the equation of the line.

Give your answer in the form $y = mx + c$

[3 marks]

Answer _____

10

Turn over ►





16 A straight line

has gradient -2
and
passes through the point (10, -17)

Work out the equation of the line.

Give your answer in the form $y = mx + c$

[3 marks]

Answer _____

17 A straight line

has gradient 0.5
and
passes through the point (8, -3)

Work out the equation of the line.

Give your answer in the form $y = mx + c$

[3 marks]

Answer _____





11 Work out the equation of the straight line through (3, 5) and (6, 11) [4 marks]

Answer _____

19 Work out the equation of the straight line through (-4, 2) and (2, 5) [4 marks]

Answer _____

20 Work out the equation of the straight line through (3, 16) and (8, 1) [4 marks]

Answer _____

