

- 1 Find the gradient of the straight line with equation $5x + 2y = 7$

Equation of straight line : $y = mx + c$

Rearrange equation to
 $y = mx + c$

where m = gradient
 c = y -intercept

$$5x + 2y = 7$$

$$2y = -5x + 7$$

$$y = \boxed{-\frac{5}{2}}x + \frac{7}{2} \quad \textcircled{1}$$

← gradient, m

$$-\frac{5}{2} \quad \textcircled{1}$$

(Total for Question 1 is 2 marks)

Line **L** has equation $y = 2 - 3x$

2 (b) Write down the gradient of line **L**.

$$y = \underline{-3x} + 2$$

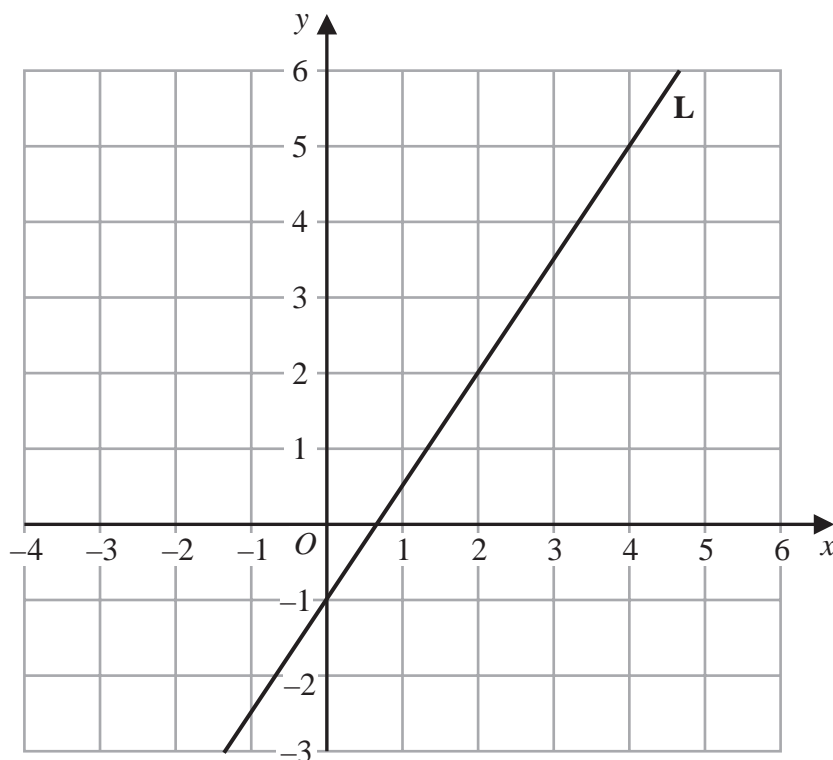
↑
m

-3 ①

(1)

(Total for Question 2 is 1 marks)

3 Line **L** is drawn on the grid.



Find an equation for **L**

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

$$c = y\text{-intercept} = -1 \quad (1)$$

$$\text{gradient} : \frac{5 - (-1)}{4 - 0}$$

$$= \frac{6}{4} = \frac{3}{2} \quad (1)$$

$$y = \frac{3}{2}x - 1 \quad (1)$$

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

(Total for Question 3 is 3 marks)

4 The straight line **L** has equation $2y + 7x = 10$

(a) Find the gradient of **L**

$$2y = -7x + 10 \quad (1)$$

$$y = -\frac{7}{2}x + 5$$

$$-3.5 \quad (1)$$

(2)

(b) Find the coordinates of the point where **L** crosses the y-axis.

$$x = 0$$

$$y = -\frac{7}{2}(0) + 5$$

$$y = 5$$

$$(0, 5)$$

$$(0, 5) \quad (1)$$

(Total for Question 4 is 3 marks)