



## STRAIGHT LINE GRAPHS

### THE STRAIGHT LINE EQUATION

Ref: G291. **3F1**

<b>A1</b> State the gradient and the $y$ -axis intercept of  $y = 3x + 7$	<b>A2</b> State the gradient and the $y$ -axis intercept of  $y = 7x - 3$	<b>A3</b> State the gradient and the $y$ -axis intercept of  $y = 3 - 7x$	<b>A4</b> State the gradient and the $y$ -axis intercept of  $y = -7 + 3x$
<b>B1</b> State the gradient and the $y$ -axis intercept of  $y = \frac{2}{3}x + 7$	<b>B2</b> State the gradient and the $y$ -axis intercept of  $y = \frac{3}{4} + 2x$	<b>B3</b> State the gradient and the $y$ -axis intercept of  $y = 3 - \frac{2}{5}x$	<b>B4</b> State the gradient and the $y$ -axis intercept of  $y = \frac{1}{3}x + \frac{2}{3}$
<b>C1</b> Work out the gradient and the $y$ -axis intercept of  $2y = 4x + 10$	<b>C2</b> Work out the gradient and the $y$ -axis intercept of  $3y = 9 - 6x$	<b>C3</b> Work out the gradient and the $y$ -axis intercept of  $3y = 2x + 1$	<b>C4</b> Work out the gradient and the $y$ -axis intercept of  $4y = 2x - 9$
<b>D1</b> Work out the gradient and the $y$ -axis intercept of  $y + 8 = 4x$	<b>D2</b> Work out the gradient and the $y$ -axis intercept of  $y + 3x = 6$	<b>D3</b> Work out the gradient and the $y$ -axis intercept of  $2x + y - 3 = 0$	<b>D4</b> Work out the gradient and the $y$ -axis intercept of  $5x = 3 + y$



## STRAIGHT LINE GRAPHS THE STRAIGHT LINE EQUATION

$$y = mx + c$$

Ref: G291. **3F1**

<b>A1</b> State the gradient and the y-axis intercept of  $y = 3x + 7$  $m = 3$ $c = 7$	<b>A2</b> State the gradient and the y-axis intercept of  $y = 7x - 3$  $m = 7$ $c = -3$	<b>A3</b> State the gradient and the y-axis intercept of  $y = 3 - 7x$ $y = -7x + 3$  $m = -7$ $c = 3$	<b>A4</b> State the gradient and the y-axis intercept of  $y = -7 + 3x$ $y = 3x - 7$  $m = 3$ $c = -7$
<b>B1</b> State the gradient and the y-axis intercept of  $y = \frac{2}{3}x + 7$  $m = \frac{2}{3}$ $c = 7$	<b>B2</b> State the gradient and the y-axis intercept of  $y = \frac{3}{4} + 2x$ $y = 2x + 0.75$  $m = 2$ $c = 0.75$	<b>B3</b> State the gradient and the y-axis intercept of  $y = 3 - \frac{2}{5}x$ $y = -0.4x + 3$  $m = -0.4$ $c = 3$	<b>B4</b> State the gradient and the y-axis intercept of  $y = \frac{1}{3}x + \frac{2}{3}$  $m = \frac{1}{3}$ $c = \frac{2}{3}$
<b>C1</b> Work out the gradient and the y-axis intercept of  $2y = 4x + 10$ $y = 2x + 5$  $m = 2$ $c = 5$	<b>C2</b> Work out the gradient and the y-axis intercept of  $3y = 9 - 6x$ $y = -2x + 3$  $m = -2$ $c = 3$	<b>C3</b> Work out the gradient and the y-axis intercept of  $3y = 2x + 1$ $y = \frac{2}{3}x + \frac{1}{3}$  $m = \frac{2}{3}$ $c = \frac{1}{3}$	<b>C4</b> Work out the gradient and the y-axis intercept of  $4y = 2x - 9$ $y = 0.5x - 2.25$  $m = 0.5$ $c = -2.25$
<b>D1</b> Work out the gradient and the y-axis intercept of  $y + 8 = 4x$ $y = 4x - 8$  $m = 4$ $c = -8$	<b>D2</b> Work out the gradient and the y-axis intercept of  $y + 3x = 6$ $y = -3x + 6$  $m = -3$ $c = 6$	<b>D3</b> Work out the gradient and the y-axis intercept of  $2x + y - 3 = 0$ $y = -2x + 3$  $m = -2$ $c = 3$	<b>D4</b> Work out the gradient and the y-axis intercept of  $5x = 3 + y$ $y = 5x - 3$  $m = 5$ $c = -3$