

(C1-5.1a) Name:

Homework Questions 1 – Gradient of a Line using $y=mx+c$

1. State the gradient and the y-intercept of the following linear equations

a) $y = 2x - 3$

$$m = 2 \quad c = -3$$

b) $y = 4 - 6x$

$$m = -6 \quad c = 4$$

c) $2y = 8x + 4$

$$m = 4 \quad c = 2$$

d) $4 = 7x + 3y$

$$m = -\frac{7}{3} \quad c = \frac{4}{3}$$

2. These lines intercept the y axis at (0, c) find the value of c.

a) $3x = 2y - 5$

$$C = 2.5$$

b) $7y - 2x + 4 = 0$

$$C = -\frac{4}{7}$$

c) $y = 6 - 2x$

$$C = 6$$

3. A line is parallel to the line $y=4x-2$ and has an intercept of 4. What is the equation of the line?

$$y = 4x + 4$$

4. A line is parallel to $2x-4y-6=0$ and passes through the point (0,5). What is the equation of the line?

$$2y = x + 10$$

5. The line $2x-5y=20$ meets the y-axis at point A and the x-axis at point B. work out the coordinates of points A and B.

$$A(0, -4) \quad B(10, 0)$$