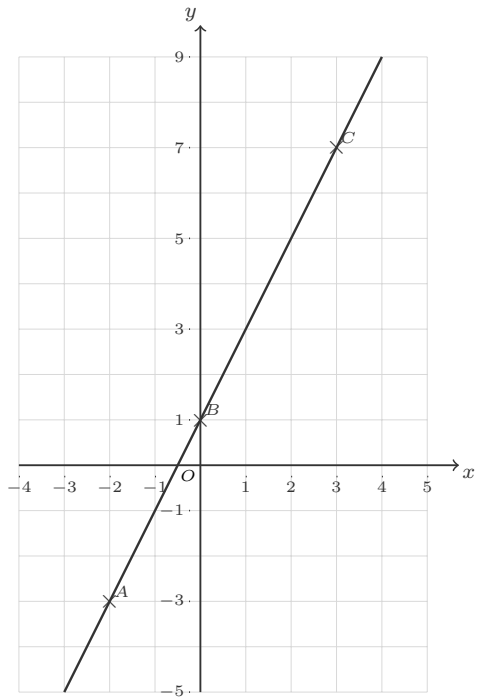
1 The line drawn passes through $A(-2, -3)$, $B(0, 1)$ and $C(3, 7)$.



(a) Find the gradient using A and B (2)

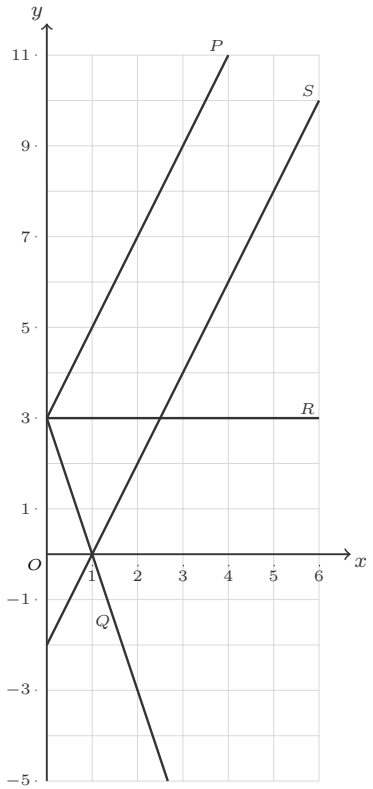
(b) Find the gradient using B and C (2)

(c) Find the gradient using A and C (2)

(d) **Write down what your three answers tell you about the gradient of a straight line.** (2)

(8 marks)

2 Match each equation to one of the four lines by its gradient and its y-intercept. **No plotting.**



(a) $y = 2x + 3$ (1)

(b) $y = 2x - 2$ (1)

(c) $y = -3x + 3$ (1)

(d) $y = 3$ (1)

(4 marks)

3 Find the gradient of the line through each pair of points.

(a) $(2, 1)$ and $(5, 13)$ (1)

(b) $(-1, 8)$ and $(2, -1)$ (1)

(c) $(-3, -5)$ and $(1, 3)$ (1)

(3 marks)

4 A line has gradient -4 and passes through $(0, 9)$.

(a) Write down its equation (1)

(b) Find where it crosses the x-axis (2)

(c) A second line has the same gradient and crosses the y-axis at 1. Write its equation, and say how the two lines are related. (3)

(6 marks)