AQA, OCR, Edexcel

GCSE

GCSE Maths

Straight Lines and Gradients Answers

Name:

MME
Mathsmadeeasy.co.uk

Total Marks: /21

Straight Lines and Gradients (Written Problems)

1. Answer the following questions about straight line graphs:
    a. What is the equation of a straight line and what does each letter represent? (2)
        - $y = mx + C$
        - y and x are coordinates on the line, m is the gradient and c is the y intercept.

    b. Give the equation of the straight line that passes through (0,0) with gradient 1.

        - $y = x$

(4 Marks)

2. Give that equation of the straight line with gradient 2 that passes through (1,4) and (2,6).
    - $y = 2x + 2$

(2 marks)

3. A straight line has a gradient of 2 and passes through (0,2). Write down another coordinate that the line passes through.
    - *Any coordinate that lies on the line $y = 2x + 2$. E.g. $(1,3), (-1,0)$ etc*

(2 marks)

4. A line passes through the points (0,-2) and (-1,-4) and crosses the y axis at -2. Find the equation of the straight line.
    - $y = 2x - 2$

(2 marks)

5. A straight line passes through (0,0) and (2,8). Find the equation of the line.
* $y = 4x$

(4 marks)

6. A straight line passes through (4,4) and (6,12). Find the equation of the line.
* $y = 4(x - 3)$

(4 marks)

7. A line crosses the y axis at 2 and passes through (1,4). Find the equation of the line.
* $y = 2(x + 1)$

(3 marks)