National 5 Homework : 1 year course
Straight Line

1. The line $y = 3x + 4$ has gradient of 3 and meets the y axis (y intercept) at the point (0 , 4).
    Write down the value of the gradient and y intercept for the following lines.

    (a) $y = 5x - 3$ (b) $y = -3x + 5$ (c) $y = 5 - \frac{1}{2}x$

2. Write down the equation of the line that has a gradient of 4 and cuts the y-axis at -2.

3. Find the equation of the line AB which goes through the points A(-5 , -3) and B (7 , 2)

4. Rearrange into $y = mx + c$ and then write down the gradient and y- intercept of each equation.

    (a) $8x + 4y = 20$ (b) $9x + 5y = 15$ (c) $10x - 5y + 20 = 0$

5. Find the equation of the line that is:-

    (a) Parallel to a line with gradient of 4 and goes through the point (7, 4)
    (b) Parallel to the line $y = 3x + 6$ and goes through (4, -5)
    (c) Parallel to the line $3x + 6y = 12$ and goes through (-5, -7)