Equation of the straight line Questions part2

1. The straight line $y=mx + c$ moves through the points (-1, 2) and (5, -10). Find the values of m and c and hence write down the particular equation that represents the straight line.

2. Find the values of m and c if the straight line $y= mx + c$ moves through the points (2, 8) and (-1, -10). Therefore write down the particular equation for the straight line.

3. Find the values of m and c if the straight line $y= mx + c$ moves through the points (3, 10) and (1, -4). Therefore write down the particular equation for the straight line.

4. (a) Using a scale of 1cm to represent 1 unit on each axis plot on graph paper the points E(0, 2) and F(-2, 8).
    (b) Calculate the gradient of EF
    © Determine the point where EF meets the y- axis
    (d) Write down the equation of EF in the form $y= mx + c$

    5. The coordinates of H and I are (8, 5) and (-4, 2) respectively. X is the midpoint of HI

 (a) Calculate :

(i) the length of HI

(ii) the gradient of HI

(iii) the coordinates of X

(iv) the intercept of HI on the y-axis

(b) Hence write down the particular equation for the straight line HI.

6. The coordinates of O and P are (-1, -3) and (10, 3) respectively. X is the midpoint of OP

 (a) Calculate :

(i) the length of OP

(ii) the gradient of OP

(iii) the coordinates of X

(iv) the intercept of OP on the y-axis

(b) Hence write down the particular equation for the straight line OP.

7. The coordinates of B and C are (5, 1) and (-5, -7) respectively. X is the midpoint of BC

 (a) Calculate :

(i) the length of BC

(ii) the gradient of BC

(iii) the coordinates of X

(iv) the intercept of BC on the y-axis

(b) Hence write down the particular equation for the straight line BC.

8. The coordinates of G and H are (1, -10) and (-3, 2) respectively. X is the midpoint of GH

 (a) Calculate :

(i) the length of GH

(ii) the gradient of GH

(iii) the coordinates of X

(iv) the intercept of GH on the y-axis

(b) Hence write down the particular equation for the straight line GH.