Equation of the straight line Questions part1

1. The straight line y=mx + c moves through the points (-2,-1) and (3,9). 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,-10) and (1,-1). 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 (5, 0) and (-3, 8). 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 S(1, 9) and T(-1, 5).
   (b) Calculate the gradient of ST
   © Determine the point where ST meets the y- axis
   (d) Write down the equation of ST in the form y= mx + c

5. The coordinates of U and V are (2, 3) and (-1, -9) respectively. X is the midpoint of UV

(a) Calculate :

(i) the length of UV

(ii) the gradient of UV

(iii) the coordinates of X

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

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

6. The coordinates of L and M are (-2, 5) and (4, 8) respectively. X is the midpoint of LM

(a) Calculate :

(i) the length of LM

(ii) the gradient of LM

(iii) the coordinates of X

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

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

7. The coordinates of Q and R are (-3, 2) and (-6, 0) respectively. X is the midpoint of QR

(a) Calculate :

(i) the length of QR

(ii) the gradient of QR

(iii) the coordinates of X

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

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

8. The coordinates of D and E are (1, 5) and (0, -4) respectively. X is the midpoint of DE

(a) Calculate :

(i) the length of DE

(ii) the gradient of DE

(iii) the coordinates of X

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

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