<u>**Graphs**</u>

- Do the review exercise of graphs to recall your knowledge.

<u>**Functions**</u>

- When there are 2 quantities as x and y, the relationship between these two quantities is expressed as   y =2x

   y=3x -5 or in such a way. It is known as a function.

- According to this relationship the value of y corresponding to different values of x can be found.
- Example:

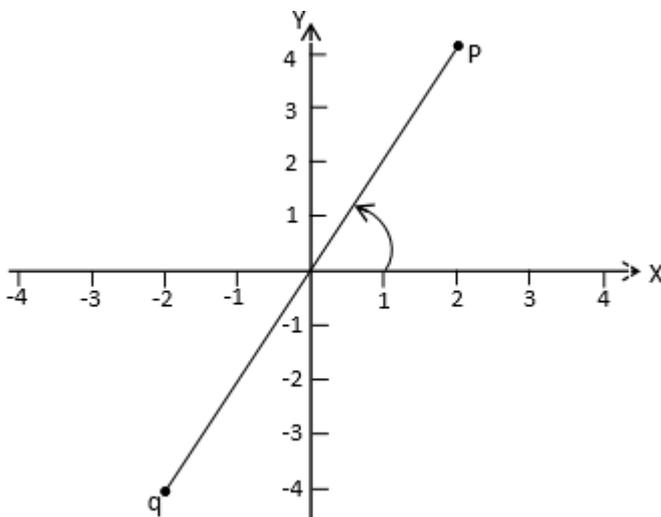   In the function , y = 2x – 1 when x = 5, $y = 2x – 1$

$$y = 2 \times 5 -1$$

$$y = 10 – 1$$

$$y = 9$$

- The gradient of the graph in the form of y=mx +c is m.
- Drawing a graph of function y = 2x

x	-2	0	2
y	-4	0	4

- The y values corresponding to the x values are substituted in above table .Accordingly the graph of the function is given below.

- This is a straight line. The graph of every linear equation of x is a straight line.

- When any point on the line other than the origin is considered, the value of $\frac{y\ coordinate}{x\ coordinate}$ of that point is a constant. This constant value is called the gradient (m) of the graph.

  Gradient of point p(m) = $\frac{4}{2}$ = 2

  Gradient of point q (m) = $\frac{-4}{-2}$ = 2

Accordingly,

- The gradient of the function is 2.
- Do the activity 1 given in the text book. (page number 129)
- Such functions are y=mx type graphs.
- Do the exercise 20.1 and 20.2 given in the text book.