

COVID -19 Sathi Pasala

4th week July

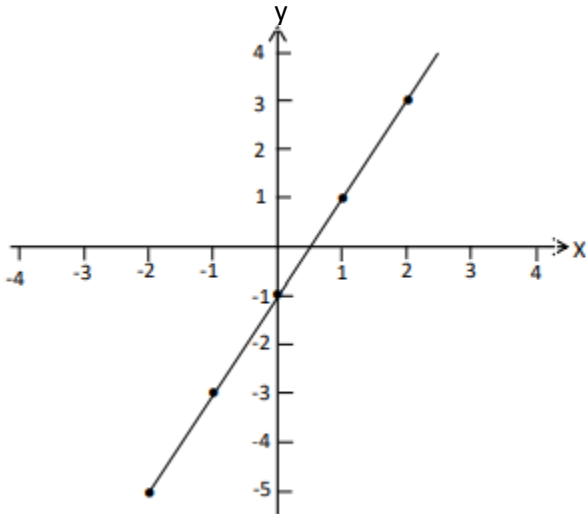
Grade 9- Graphs

Graphs of the functions of the form $y=mx+c$ and functions given by $ax+by=c$

- Example: Drawing a graph of the function $y=2x-1$

x	$2x - 1$	y	(x,y)
-2	$2 \times -2 - 1$	-5	(-2,-5)
-1	$2 \times -1 - 1$	-3	(-1,-3)
0	$2 \times 0 - 1$	-1	(0,-1)
1	$2 \times 1 - 1$	1	(1,1)
2	$2 \times 2 - 1$	3	(2,3)

- Accordingly the graph is given below.



- Accordingly the gradient (m , $y=mx+c$) of the function $y=2x-1$ is 2
- The distance from the origin to the point where the straight line intersect the y axis is known as intercept. It is denoted by c ($y=mx+c$).

$$C = -1$$

Graph of functions given by equation of the form $ax+by=c$

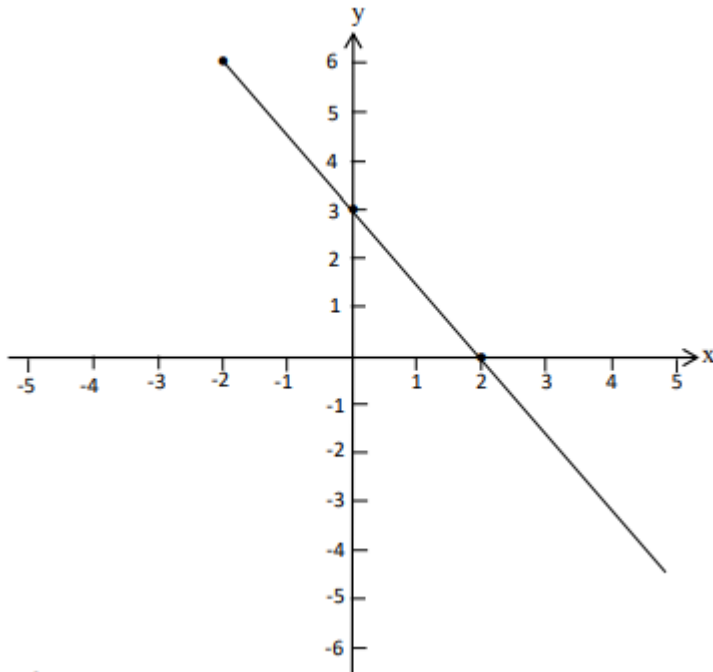
- Example: Drawing a graph of the function $3x+2y=6$

$$3x+2y=6$$

$$\frac{2y}{2} = \frac{-3x}{2} + \frac{6}{2}$$

$$y = \frac{-3x}{2} + 3$$

x	$\frac{-3}{2}x + 3$	y
-2	$\frac{-3 \times -2}{2} + 3$	6
0	$\frac{-3 \times 0}{2} + 3$	3
2	$\frac{-3 \times 2}{2} + 3$	0



$$y = \frac{-3}{2}x + 3$$

- In this graph, $m = \frac{-3}{2}$ and $c = 3$
- Accordingly do the exercise 20.3