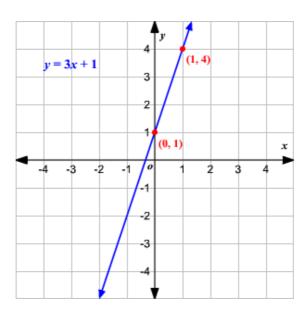
## FlexiPrep: Downloaded from flexiprep.com [https://www.flexiprep.com/]

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## NCERT Class 9 Solutions: Linear Equation in Two Variable (Chapter 4) Exercise 4.3 – Part 1

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Linear equation:



Q-1 Draw the graph of each of the following linear equations in two variables:

1. 
$$x + y = 4$$

2. 
$$x - y = 2$$

3. 
$$y = 3x$$

4. 
$$3 = 2x + y$$

Solution:

1. 
$$x + y = 4$$

So, 
$$y = 4 - x$$

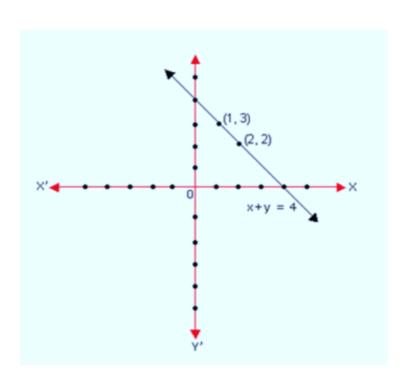
If 
$$x = 1$$
 then  $y = 4 - x = 4 - 1 = 3$ 

Point 
$$(x, y) = (1, 3)$$

If 
$$x = 2$$
 then  $y = 4 - x = 4 - 2 = 2$ 

Point 
$$(x, y) = (2, 2)$$

We plot the points (1,3) and (2,2) on the graph paper and join the same by a ruler to get the line which is the graph of the equation x + y = 4



1. 
$$x - y = 2$$

So, 
$$y = x - 2$$

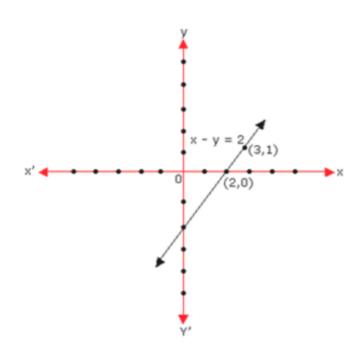
If 
$$x = 2$$
 then  $y = x - 2 = 2 - 2 = 0$ 

Point (x, y) = (2, 0)

If x = 3 then y = x - 2 = 3 - 2 = 1

Point (x, y) = (3, 1)

We plot the points (2,0) and (3,1) on the graph paper and join the same by a ruler to get the line which is the graph of the equation x - y = 2



1. 
$$y = 3x$$

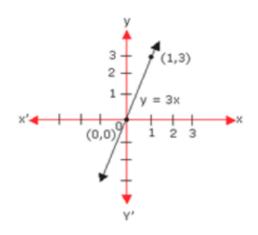
If 
$$x = 0$$
 then  $y = 3x = 3(0) = 0$ 

Point 
$$(x, y) = (0, 0)$$

If 
$$x = 1$$
 then  $y = 3x = 3 = 3$ 

Point 
$$(x, y) = (1, 3)$$

We plot the points (0,0) and (1,3) on the graph paper and join the same by a ruler to get the line which is the graph of the equation y = 3x



1. 
$$3 = 2x + y$$

So, 
$$y = 3 - 2x$$

If 
$$x = 1$$
 then  $y = 3 - 2x = 3 - 2(1) = 1$ 

Point (x, y) = (1, 1)

If 
$$x = 0$$
 then  $y = 3 - 2x = 3$ 

Point 
$$(x, y) = (1, 3)$$

We plot the points (1,1) and (1,3) on the graph paper and join the same by a ruler to get the line which is the graph of the equation 3 = 2x + y

