



### Linear Equations in Two Variables Ex 13.3 Q2

**Answer :**

We observe that  $x = 3$  and  $y = 12$  is the solution of the following equations

$$4x - y = 0 \text{ and } 3x - y + 3 = 0$$

So, we get the equations of two lines passing through  $(3, 12)$  are,  $4x - y = 0$  and  $3x - y + 3 = 0$ .

We know that passing through the given point infinitely many lines can be drawn. So, there are infinitely many lines passing through  $(3, 12)$

**Answer :**

Total fare of Rs  $y$  for covering the distance of  $x$  km is given by

$$y = 15 + 8(x - 1)$$

$$y = 15 + 8x - 8$$

$$y = 8x + 7$$

Where, Rs  $y$  is the total fare  $(x - 1)$  is taken as the cost of first kilometer is already given Rs 15 and 1 has to subtracted from the total distance travelled to deduct the cost of first kilometer.

### Linear Equations in Two Variables Ex 13.3 Q3

**Answer :**

Total charges of Rs 27 of which Rs  $x$  for first three days and Rs  $y$  per day for 4 more days is given by

$$x + y(7 - 3) = 27$$

$$x + 4y = 27$$

Here,  $(7 - 3)$  is taken as the charges for the first three days are already given at Rs  $x$  and we have to find the charges for the remaining four days as the book is kept for the total of 7 days.

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