

$$\textcircled{11} \textcircled{iii} \quad x + y = 3$$

$$\Rightarrow x = 3 - y \dots \textcircled{i}$$

$$3x + 3y = 9$$

$$\Rightarrow 3x = 9 - 3y$$

$$\Rightarrow x = \frac{9 - 3y}{3}$$

$$x = 3 - y \dots \textcircled{ii}$$

For  $\textcircled{i}, \textcircled{ii}$

$$\begin{array}{cccc} x & 3 & 1 & 0 \\ y & 0 & 2 & 3 \end{array}$$

Consistent

$$\textcircled{12} \quad 2x + y = 4$$

$$\Rightarrow y = 4 - 2x$$

x	0	2	1
y	4	0	2

$$2x - y = 4$$

$$y = 2x - 4$$

x	2	3	4	0
y	0	2	4	-4

$$\textcircled{13} \quad x + y = 2 \dots \textcircled{i}$$

$$2x - y = 1 \dots \textcircled{ii}$$

$$\textcircled{i} + \textcircled{ii}$$

$$\begin{array}{r} x + y = 2 \\ 2x - y = 1 \\ \hline 3x = 3 \end{array}$$

$$\Rightarrow x = 1$$

Subs. value of  $x$   
in eqn.  $\textcircled{i}$

$$1 + y = 2$$

$$\Rightarrow y = 2 - 1$$

$$\Rightarrow y = 1$$

$\therefore x = 1, y = 1$  (Sol)

equation of a line  
passing through  
 $(1, 1)$  is  $x + 2y = 3$

Infinitely many  
such lines are  
possible