



2. (2,4)

$$(a) x + y = 16$$

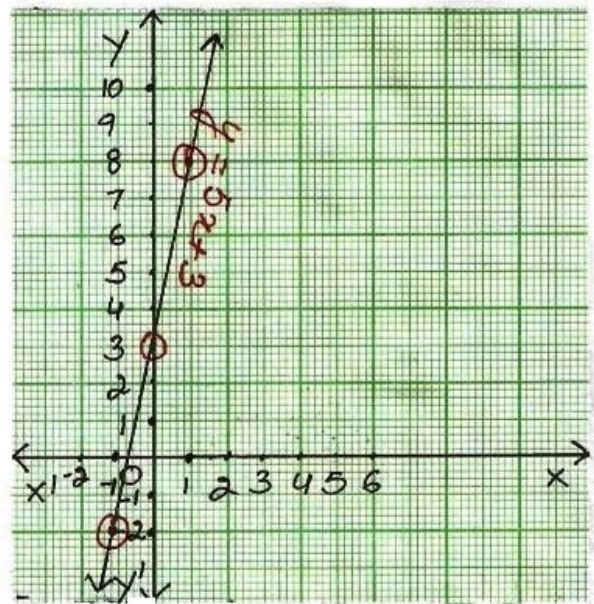
$$2x + y = 18$$

(b) Infinitely Many

(c) Infinitely many lines can be drawn passing through a point

$$\Rightarrow y = 5x + 3$$

x	0	1	2
y	3	8	13



3. (3,4) lies on the graph of $3y = ax + 7$

$$\therefore 3 \times 4 = a \times 3 + 7$$

$$\Rightarrow 3a = 12 - 7$$

$$\Rightarrow a = \frac{5}{3}$$

4. distance cov. = x km

Fare for first km = Rs 8

remaining distance = $(x-1)$ km

Fare for remain. dis. = Rs $5(x-1)$

total fare = Rs y
acc to condition

$$y = 8 + 5(x-1)$$

$$\Rightarrow y = 8 + 5x - 5$$

$$\Rightarrow 5x - y + 3 = 0$$

(5) i \because line passes through origin and observing given values (ii) $x + y = 0$

(5) ii observing three given values

(iii) $y = -x + 2$ [Sum of x and y = 2 in each case]