

$$8. \quad x + 2y = 8$$

$$\text{Put } y = 0$$

$$x + 2 \times 0 = 8$$

$$\Rightarrow x = 8$$

\therefore pt. on x axis

is $(8, 0)$

$$\text{Put } x = 0$$

$$0 + 2y = 8$$

$$\Rightarrow y = 4$$

Pt on y axis $(0, 4)$

$$9. \quad \text{Put } x = y$$

$$2x + cx = 8$$

$$\Rightarrow cx = 8 - 2x$$

$$\Rightarrow c = \frac{8 - 2x}{x}, x \neq 0$$

$$10. \quad y \propto x$$

$$\Rightarrow y = kx$$

$$\text{Put } y = 12, x = 4$$

$$12 = k \times 4$$

$$\Rightarrow k = 3$$

$$\therefore \text{eqn is } y = 3x$$

$$\text{if } x = 5$$

$$y = 3 \times 5$$

$$= 15$$