

- ⑫ let Salims age two years ago = x years
daughters age two years ago = y years

con I

$$x = 3y \dots \text{①}$$

cI $x + 8 = 2(y + 8) + 4$

$$\Rightarrow x + 8 = 2y + 16 + 4$$

$$\Rightarrow x - 2y = 12 \dots \text{②}$$

From ①, ②

$$3y - 2y = 12$$

$$\Rightarrow y = 12$$

Sub ①

$$x = 36$$

Salims present age
= 38 years

daughters present age
= 14 years

- ⑬ let father's present age = x years
let sum of ages of two children (present) = y years
- acc to cI $x = 2y \dots \text{①}$

acc to condition II

$$x + 20 = y + 40$$

$$\Rightarrow x - y = 20 \dots \text{②}$$

From ①, ②

$$2y - y = 20$$

$$\Rightarrow y = 20$$

Sub ①

$$x = 2 \times 20 = 40$$

Present age of father
= 40 years

- ⑭ let the numbers be x, y

acc to con I

$$\frac{x}{y} = \frac{5}{6}$$

$$\Rightarrow 6x - 5y = 0 \dots \text{①}$$

acc to con. II

$$\frac{x-8}{y-8} = \frac{4}{5}$$

$$\Rightarrow 5x - 40 = 4y - 32$$

$$\Rightarrow 5x - 4y = 8 \dots \text{②}$$

$$\text{①} \times 5 - \text{②} \times 6$$

$$30x - 25y = 0$$

$$30x - 24y = 48$$

$$\hline -y = -48$$

$$\Rightarrow y = 48$$

Sub ②

$$6x - 48 \times 5 = 0$$

$$\Rightarrow 6x = 240$$

$$\Rightarrow x = 40$$

\therefore nos are 40, 48