

## Chapter 02

### LINEAR EQUATIONS IN ONE VARIABLE

#### EXAMPLES:

#### Method- 3:

Reducing equations to simpler form or linear form.

**Example:** Solve  $\frac{x-4}{3} - \frac{x-1}{2} = 3$

**Solution:**  $\frac{x-4}{3} - \frac{x-1}{2} = 3$

$$\Rightarrow \frac{2(x-4) - 3(x-1)}{6} = 3$$

( $\because$  Take L.C.M on L.H.S)

$$\Rightarrow 2x - 8 - 3x + 3 = 6 \times 3$$

( $\because$  By cross Multiplication)

$$\Rightarrow 2x - 3x - 5 = 18$$

$$\Rightarrow 2x - 3x = 18 + 5$$

$$\Rightarrow -x = 23$$

$$\therefore \boxed{x = -23} \quad (\because \text{Both sides divided by } "-1")$$