## LINEAR EQUATION IN ONE VARIABLE

CROSS-MULTIPLICATION METHOD FOR SOLVING EQUATION OF THE FORM

## EXERCISE

**Q.1** Solve : 
$$\frac{x+b}{a-b} = \frac{x-b}{a+b}$$

**Q.2** Solve : 
$$\frac{(4+x)(5-x)}{(2+x)(7-x)} = 1$$

**Q.3** Solve: 
$$\frac{1}{x+1} + \frac{1}{x+2} = \frac{2}{x+10}$$

Q.4 Solve: 
$$\frac{6x^2 + 13x - 4}{2x + 5} = \frac{12x^2 + 5x - 2}{4x + 3}$$

**Q.5** Solve: 
$$\frac{4x+17}{18} - \frac{13x-2}{17x-32} + \frac{x}{3} = \frac{7x}{12} - \frac{x+16}{36}$$

**Q.6** Solve the following equations.

(i) 
$$\frac{8x-3}{3x} = 2$$
  
(ii)  $\frac{9x}{7-6x} = 15$   
(iii)  $\frac{z}{z+15} = \frac{4}{9}$   
(iv)  $\frac{3y+4}{2-6y} = \frac{-2}{5}$   
(v)  $\frac{7y+4}{y+2} = \frac{-4}{3}$ 

## ANSWER KEY

(ii)  $x = \frac{35}{33}$ 

(iv) y = - 8

- 1. x = -a2.  $x = \frac{3}{2}$ 3.  $x = -\frac{26}{17}$ 4. x = 15. x = 46. (i)  $x = \frac{3}{2}$ (iii) z = 12
  - (v)  $y = -\frac{4}{5}$