

Chapter 02

LINEAR EQUATIONS IN ONE VARIABLE

RULES FOR SOLVING THE LINEAR EQUATION:

Example: Solve $x - 5 = 12$

- (i) The same quantity can be added to both sides of the equation.

$$x - 5 + \text{Add}_{(5)} = 12 + \text{Add}_{(5)}$$

- (ii) The same quantity can be subtracted from both sides of the equation.

$$(x - 5) - \text{sub}_{(12)} = 12 - \text{sub}_{(12)}$$

- (iii) Both sides of the equation can be multiplied by the same non-zero numbers.

$$(x - 5) \text{Multiply}_{(2)} = 12(\text{Multiply})_{(2)}$$

- (iv) Both sides of the equation can be divided by the same non-zero number.

$$\frac{x - 5}{\text{Divide}_{(2)}} = \frac{12}{\text{Divide}_{(2)}}$$