

Factorization

Ex:

$$x^2 - x - 30 = 0$$

step-1

$$1x^2 - 1x - 30 = 0$$

step-2

$$x^2 + 5x - 6x - 30 = 0$$

$$x(x+5) - 6(x+5) = 0$$

$$(x+5)(x-6) = 0$$

$$x+5=0$$

$$x = 0 - 5$$

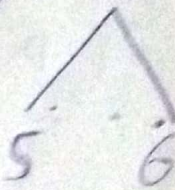
$$\boxed{x = -5}$$

$$x-6=0$$

$$x = 0 + 6$$

$$\boxed{x = 6}$$

$$(1) \times (-30) = -30$$



suppose

$$3 \times 10 = 30 \quad \times$$

$$2 \times 15 = 30 \quad \times$$

$$5 \times 6 = 30 \quad \checkmark$$

Factors

$$5 - 6 = -1$$

$$(5) \times (-6) = -30$$

$$+6 - 5 = +1$$

$$+5 - 6 = -1$$