

Chapter 09

ALGEBRAIC EXPRESSION & IDENTITIES

Identity- III:

$$(a + b)(a - b) = a^2 - b^2$$

Proof:

$$\begin{aligned}(a + b)(a - b) &= a(a - b) + b(a - b) \\ &= a^2 - \cancel{ab} + \cancel{ba} - b^2\end{aligned}$$

$$\therefore \boxed{(a + b)(a - b) = a^2 - b^2}$$

