

$$\begin{array}{r}
 2 \text{ (iii)} \quad a^2 + b \\
 \times \quad a + b^2 \\
 \hline
 a^3 + ab \\
 \quad \quad \quad + a^2b^2 + b^3 \\
 \hline
 a^3 + ab + a^2b^2 + b^3 \\
 \hline
 \end{array}$$

$$\begin{aligned}
 2 \text{ (iv)} & (p^2 - q^2)(2p + q) \\
 & = 2p^3 + p^2q - 2pq^2 - q^3
 \end{aligned}$$

$$\begin{aligned}
 3 \text{ (i)} & (x^2 - 5)(x + 5) + 25 \\
 & = x^3 + 5x^2 - 5x - \cancel{25} + \cancel{25} \\
 & = x^3 + 5x^2 - 5x
 \end{aligned}$$

$$\begin{aligned}
 3 \text{ (ii)} & (a^2 + 5)(b^3 + 3) + 5 \\
 & = a^2b^3 + 3a^2 + 5b^3 + 15 + 5 \\
 & = a^2b^3 + 3a^2 + 5b^3 + 20
 \end{aligned}$$

$$\begin{aligned}
 3 \text{ (iii)} & (t + s^2)(t^2 - s) \\
 & = t^3 - st + s^2t^2 - s^3
 \end{aligned}$$

$$\begin{aligned}
 3 \text{ (iv)} & (a+b)(c-d) + (a-b)(c+d) + 2(ac+bd) \\
 & = ac - \cancel{ad} + \cancel{bc} - bd + ac + \cancel{ad} - \cancel{bc} - bd \\
 & \quad \quad \quad + 2ac + 2bd \\
 & = 4ac - \cancel{2bd} + \cancel{2bd} \\
 & = 4ac
 \end{aligned}$$