

$$\begin{aligned}\text{tip1: } (ax + b)^3 \\ = a^3x^3 + 3a^2bx^2 + 3ab^2x + b^3\end{aligned}$$

$$\begin{aligned}\text{tip2: } (ax - b)^3 \\ = a^3x^3 - 3a^2bx^2 + 3ab^2x - b^3\end{aligned}$$

$$\begin{aligned}(1) \quad 2(x + 2)^3 \\ = 2(x^3 + 6x^2 + 12x + 8) \\ = 2x^3 + 12x^2 + 24x + 16 \\ (2) \quad (3x - 4)^3 \\ = 27x^3 - 108x^2 + 144x - 64 \\ (3) \quad -(5x + 8)^3 \\ = -(125x^3 + 600x^2 + 960x + 512) \\ = -125x^3 - 600x^2 - 960x - 512\end{aligned}$$

$$\begin{aligned}(4) \quad -(2x - 1)^3 \\ = -(8x^3 - 12x^2 + 6x - 1) \\ = -8x^3 + 12x^2 - 6x + 1\end{aligned}$$

$$\begin{aligned}(5) \quad -(4x + 3)^3 \\ = -(64x^3 + 144x^2 + 108x + 27) \\ = -64x^3 - 144x^2 - 108x - 27\end{aligned}$$

$$\begin{aligned}(6) \quad -(5x + 1)^3 \\ = -(125x^3 + 75x^2 + 15x + 1) \\ = -125x^3 - 75x^2 - 15x - 1\end{aligned}$$

$$\begin{aligned}(7) \quad (x + 8)^3 \\ = x^3 + 24x^2 + 192x + 512\end{aligned}$$

$$\begin{aligned}(8) \quad -(x - 1)^3 \\ = -(x^3 - 3x^2 + 3x - 1) \\ = -x^3 + 3x^2 - 3x + 1\end{aligned}$$

$$\begin{aligned}(9) \quad -(5x + 7)^3 \\ = -(125x^3 + 525x^2 + 735x + 343) \\ = -125x^3 - 525x^2 - 735x - 343\end{aligned}$$

$$\begin{aligned}(10) \quad -(x - 2)^3 \\ = -(x^3 - 6x^2 + 12x - 8) \\ = -x^3 + 6x^2 - 12x + 8\end{aligned}$$

$$\begin{aligned}(11) \quad (x - 2)^3 \\ = x^3 - 6x^2 + 12x - 8\end{aligned}$$

$$\begin{aligned}(12) \quad -2(x - 3)^3 \\ = -2(x^3 - 9x^2 + 27x - 27) \\ = -2x^3 + 18x^2 - 54x + 54\end{aligned}$$

$$\begin{aligned}(13) \quad (x + 1)^3 \\ = x^3 + 3x^2 + 3x + 1\end{aligned}$$

$$\begin{aligned}(14) \quad -(x + 4)^3 \\ = -(x^3 + 12x^2 + 48x + 64) \\ = -x^3 - 12x^2 - 48x - 64\end{aligned}$$

$$(15) \quad -(x - 3)^3$$

$$\begin{aligned}= -(x^3 - 9x^2 + 27x - 27) \\ = -x^3 + 9x^2 - 27x + 27\end{aligned}$$

$$\begin{aligned}(16) \quad 2(x + 3)^3 \\ = 2(x^3 + 9x^2 + 27x + 27) \\ = 2x^3 + 18x^2 + 54x + 54\end{aligned}$$

$$\begin{aligned}(17) \quad -(x + 6)^3 \\ = -(x^3 + 18x^2 + 108x + 216) \\ = -x^3 - 18x^2 - 108x - 216\end{aligned}$$

$$\begin{aligned}(18) \quad -(x - 4)^3 \\ = -(x^3 - 12x^2 + 48x - 64) \\ = -x^3 + 12x^2 - 48x + 64\end{aligned}$$

$$\begin{aligned}(19) \quad -(3x - 8)^3 \\ = -(27x^3 - 216x^2 + 576x - 512) \\ = -27x^3 + 216x^2 - 576x + 512\end{aligned}$$

$$\begin{aligned}(20) \quad (3x + 7)^3 \\ = 27x^3 + 189x^2 + 441x + 343\end{aligned}$$