

Expanding Double Brackets : 2 : Answers

$$\begin{aligned} 1) \quad (3x+2)(2x+3) \\ = 6x^2 + 9x + 4x + 6 \\ = 6x^2 + 13x + 6 \end{aligned}$$

$$\begin{aligned} 2) \quad (5x-7)(4x+3) \\ = 20x^2 + 15x - 28x - 21 \\ = 20x^2 - 13x - 21 \end{aligned}$$

$$\begin{aligned} 3) \quad (2x-5)(7x-1) \\ = 14x^2 - 2x - 35x + 5 \\ = 14x^2 - 37x + 5 \end{aligned}$$

$$\begin{aligned} 4) \quad (6x+7)(6x-7) \\ = 36x^2 - 42x + 42x - 49 \\ = 36x^2 + 0x - 49 \\ = 36x^2 - 49 \end{aligned}$$

$$\begin{aligned} 5) \quad (4+3x)(5+2x) \\ = 20 + 8x + 15x + 6x^2 \\ = 20 + 23x + 6x^2 \end{aligned}$$

$$\begin{aligned} 6) \quad (5-3x)(3+7x) \\ = 15 + 35x - 9x - 21x^2 \\ = 15 + 26x - 21x^2 \end{aligned}$$

$$\text{OR } 6x^2 + 23x + 20$$

$$\text{OR } -21x^2 + 26x + 15$$

$$\begin{aligned} 7) \quad (5-2x)(9-5x) \\ = 45 - 25x - 18x + 10x^2 \\ = 45 - 43x + 10x^2 \end{aligned}$$

$$\begin{aligned} 8) \quad (3x+8)(6-5x) \\ = 18x - 15x^2 + 48 - 40x \\ = -22x - 15x^2 + 48 \end{aligned}$$

$$\text{OR } 10x^2 - 43x + 45$$

$$\text{OR } -15x^2 - 22x + 48$$

$$\begin{aligned} 9) \quad (7-4y)(2y-9) \\ = 14y - 63 - 8y^2 + 36y \\ = 50y - 63 - 8y^2 \end{aligned}$$

$$\text{OR } -8y^2 + 50y - 63$$

$$\begin{aligned} 10) \quad (5x-3)^2 \\ = (5x-3)(5x-3) \\ = 25x^2 - 15x - 15x + 9 \\ = 25x^2 - 30x + 9 \end{aligned}$$