

# 6-1 Multiplication of Binomials

$$\begin{array}{r} (x-5)(x-5) \\ \text{F} \quad \text{O} \quad \text{I} \quad \text{L} \\ x^2 - 5x - 5x + 25 \\ x^2 - 10x + 25 \end{array}$$

$$\begin{array}{r} (3x-5)(5x+8) \\ \text{F} \quad \text{O} \quad \text{I} \quad \text{L} \\ 15x^2 + 24x - 25x - 40 \\ 15x^2 - x - 40 \end{array}$$

$$\begin{array}{r} (3x-5)(3x+5) \\ \text{F} \quad \text{O} \quad \text{I} \quad \text{L} \\ 9x^2 + 15x - 15x - 25 \\ 9x^2 - 25 \end{array}$$

$$\begin{array}{r} (x-2)(x-3) \\ \text{F} \quad \text{O} \quad \text{I} \quad \text{L} \\ x^2 - 3x - 2x + 6 \\ x^2 - 6x + 6 \end{array}$$

$$\textcircled{a} \begin{array}{r} (x+3)(x+5) \\ x^2 + 5x + 3x + 15 \\ x^2 + 8x + 15 \end{array}$$

$$\begin{array}{r} (v+5)(v+1) \\ v^2 + v + 5v + 5 \\ v^2 + 6v + 5 \end{array}$$

$$\begin{array}{r} (x+9)(x+5) \\ x^2 + 5x + 9x + 45 \\ x^2 + 14x + 45 \end{array}$$

$$\begin{array}{r} (y+3)(y+2) \\ y^2 + 2y + 3y + 6 \\ y^2 + 5y + 6 \end{array}$$

$$\textcircled{b} \begin{array}{r} (t+1)(t+3) \\ t^2 + 3t + t + 3 \\ t^2 + 4t + 3 \end{array}$$

$$\begin{array}{r} (x+10)(x+3) \\ x^2 + 3x + 10x + 30 \\ x^2 + 13x + 30 \end{array}$$

$$\begin{array}{r} (x+4)(x+5) \\ x^2 + 5x + 4x + 20 \\ x^2 + 9x + 20 \end{array}$$

$$\begin{array}{r} (y+7)(y+6) \\ y^2 + 6y + 7y + 42 \\ y^2 + 13y + 42 \end{array}$$

$$\textcircled{c} \begin{array}{r} (x+7)(x+3) \\ x^2 + 3x + 7x + 21 \\ x^2 + 10x + 21 \end{array}$$

$$\begin{array}{r} (x+8)(x+7) \\ x^2 + 7x + 8x + 56 \\ x^2 + 15x + 56 \end{array}$$

$$\begin{array}{r} (x+7)(x+9) \\ x^2 + 9x + 7x + 63 \\ x^2 + 16x + 63 \end{array}$$

$$\begin{array}{r} (x+6)(x+8) \\ x^2 + 8x + 6x + 48 \\ x^2 + 14x + 48 \end{array}$$

$$\textcircled{d} \begin{array}{r} (x+5)(x+7) \\ x^2 + 7x + 5x + 35 \\ x^2 + 12x + 35 \end{array}$$

$$\begin{array}{r} (x+8)(x+3) \\ x^2 + 3x + 8x + 24 \\ x^2 + 11x + 24 \end{array}$$

$$\begin{array}{r} (x+9)(x+8) \\ x^2 + 8x + 9x + 72 \\ x^2 + 17x + 72 \end{array}$$

$$\begin{array}{r} (x+12)(x+11) \\ x^2 + 11x + 12x + 132 \\ x^2 + 23x + 132 \end{array}$$

$$\textcircled{e} \begin{array}{r} (x-3)(x-5) \\ x^2 - 5x - 3x + 15 \\ x^2 - 8x + 15 \end{array}$$

$$\begin{array}{r} (v-5)(v-1) \\ v^2 - v - 5v + 5 \\ v^2 - 6v + 5 \end{array}$$

$$\begin{array}{r} (x-9)(x-5) \\ x^2 - 5x - 9x + 45 \\ x^2 - 14x + 45 \end{array}$$

$$\begin{array}{r} (y-3)(y-2) \\ y^2 - 2y - 3y + 6 \\ y^2 - 5y + 6 \end{array}$$

$$\textcircled{f} \begin{array}{r} (t-1)(t-3) \\ t^2 - 3t - t + 3 \\ t^2 - 4t + 3 \end{array}$$

$$\begin{array}{r} (x-10)(x-3) \\ x^2 - 3x - 10x + 30 \\ x^2 - 13x + 30 \end{array}$$

$$\begin{array}{r} (x-4)(x-5) \\ x^2 - 5x - 4x + 20 \\ x^2 - 9x + 20 \end{array}$$

$$\begin{array}{r} (y-7)(y-6) \\ y^2 - 6y - 7y + 42 \\ y^2 - 13y + 42 \end{array}$$

$$\textcircled{g} \begin{array}{r} (x-7)(x-3) \\ x^2 - 3x - 7x + 21 \\ x^2 - 10x + 21 \end{array}$$

$$\begin{array}{r} (x-8)(x-7) \\ x^2 - 7x - 8x + 56 \\ x^2 - 15x + 56 \end{array}$$

$$\begin{array}{r} (x-7)(x-9) \\ x^2 - 9x - 7x + 63 \\ x^2 - 16x + 63 \end{array}$$

$$\begin{array}{r} (x-6)(x-8) \\ x^2 - 8x - 6x + 48 \\ x^2 - 14x + 48 \end{array}$$