

Distributive Property Puzzle Answers

$$\begin{aligned} 1) & 6x + (5x - 8) \\ & 6x + 1(5x) + 1(-8) \\ & 6x + 5x - 8 \\ & 11x - 8 \end{aligned}$$

$$\begin{aligned} 2) & 2x - (9x - 4) \\ & 2x - 1(9x) - 1(-4) \\ & 2x - 9x + 4 \\ & -7x + 4 \end{aligned}$$

$$\begin{aligned} 3) & -9 - (12 - 3x) \\ & -9 - 1(12) - 1(-3x) \\ & -9 - 12 + 3x \\ & -21 + 3x \\ & 3x - 21 \end{aligned}$$

$$\begin{aligned} 4) & -(5x + 5) - 4 + 8x \\ & -1(5x) - 1(5) - 4 + 8x \\ & -5x - 5 - 4 + 8x \\ & -5x + 8x - 5 - 4 \\ & 3x - 9 \end{aligned}$$

$$\begin{aligned} 5) & 7(2x - 4) - (10 - 3x) \\ & 7(2x) + 7(-4) - 1(10) - 1(-3x) \\ & 14x - 28 - 10 + 3x \\ & 14x + 3x - 28 - 10 \\ & 17x - 38 \end{aligned}$$

$$\begin{aligned} 6) & -6(5 + x) + (13x + 1) \\ & -6(5) - 6(x) + 1(13x) + 1(1) \\ & -30 - 6x + 13x + 1 \\ & -30 + 1 - 6x + 13x \\ & -29 + 7x \\ & 7x - 29 \end{aligned}$$

$$\begin{aligned} 7) & -(12 - 4x) + 8(10 - x) \\ & -1(12) - 1(-4x) + 8(10) + 8(-x) \\ & -12 + 4x + 80 - 8x \\ & -12 + 80 + 4x - 8x \\ & 68 - 4x \\ & -4x + 68 \end{aligned}$$

$$\begin{aligned} 8) & 7(2x + 2) - 9(-1 + 6x) \\ & 7(2x) + 7(2) - 9(-1) - 9(6x) \\ & 14x + 14 + 9 - 54x \\ & 14x - 54x + 14 + 9 \\ & -40x + 23 \end{aligned}$$

$$\begin{aligned} 9) & 4(-3x - 5) - (10 + 4x) \\ & 4(-3x) + 4(-5) - 1(10) - 1(4x) \\ & -12x - 20 - 10 - 4x \\ & -12x - 4x - 20 - 10 \\ & -16x - 30 \end{aligned}$$

$$\begin{aligned} 10) & 6x + (14x - 5) + (17 - 3x) \\ & 6x + 1(14x) + 1(-5) + 1(17) + 1(-3x) \\ & 6x + 14x - 5 + 17 - 3x \\ & 6x + 14x - 3x - 5 + 17 \\ & 20x - 3x + 12 \\ & 17x + 12 \end{aligned}$$

$$\begin{aligned}
 11) & -(2-x) - 3(6+8x) - 12 \\
 & -1(2) - 1(-x) - 3(6) - 3(8x) - 12 \\
 & -2 + x - 18 - 24x - 12 \\
 & x - 24x - 2 - 18 - 12 \\
 & -23x - 32
 \end{aligned}$$

$$\begin{aligned}
 12) & (4x-9) + 8(2x+3) - 7x \\
 & 1(4x) + 1(-9) + 8(2x) + 8(3) - 7x \\
 & 4x - 9 + 16x + 24 - 7x \\
 & 4x + 16x - 7x - 9 + 24 \\
 & 20x - 7x + 15 \\
 & 13x + 15
 \end{aligned}$$

$$\begin{aligned}
 13) & 11 - (3x-6) + 2(4x+5) - x \\
 & 11 - 1(3x) - 1(-6) + 2(4x) + 2(5) - x \\
 & 11 - 3x + 6 + 8x + 10 - x \\
 & -3x + 8x - x + 11 + 6 + 10 \\
 & 5x - x + 17 + 10 \\
 & 4x + 27
 \end{aligned}$$

$$\begin{aligned}
 14) & (x+2) - (x-2) - 12x \\
 & 1(x) + 1(2) - 1(x) - 1(-2) - 12x \\
 & x + 2 - x + 2 - 12x \\
 & x - x - 12x + 2 + 2 \\
 & -12x + 4
 \end{aligned}$$