

Solutions to WS 9.1 - Combining Like Terms, #1-26 all

$$\begin{aligned} \boxed{1} \quad & 9x - 3x \\ & = 6x \end{aligned}$$

$$\begin{aligned} \boxed{2} \quad & 8y - 2y \\ & = 6y \end{aligned}$$

$$\begin{aligned} \boxed{3} \quad & 5c - (3 - 2c) \\ & = 5c - 3 + 2c \\ & = 7c - 3 \end{aligned}$$

$$\begin{aligned} \boxed{4} \quad & 7d - (1 - d) \\ & = 7d - 1 + d \\ & = 8d - 1 \end{aligned}$$

$$\begin{aligned} \boxed{5} \quad & (7r + 2s) + (6r + 3s) \\ & = 7r + 2s + 6r + 3s \\ & = 13r + 5s \end{aligned}$$

$$\begin{aligned} \boxed{6} \quad & (9k + 2j) + (11k - 2j) \\ & = 9k + 2j + 11k - 2j \\ & = 20k \end{aligned}$$

$$\begin{aligned} \boxed{7} \quad & (2a - 1) - (-5a - 5) \\ & = 2a - 1 + 5a + 5 \\ & = 7a + 4 \end{aligned}$$

$$\begin{aligned} \boxed{8} \quad & (4m - 2n) + (-3m - 4n) \\ & = 4m - 2n - 3m - 4n \\ & = m - 6n \end{aligned}$$

$$\begin{aligned} \boxed{9} \quad & (5x + 7) - (2x - 7) \\ & = 5x + 7 - 2x + 7 \\ & = 3x + 14 \end{aligned}$$

$$\begin{aligned} \boxed{10} \quad & (-x + 2y) + (2x + 3y) \\ & = -x + 2y + 2x + 3y \\ & = x + 5y \end{aligned}$$

$$\begin{aligned} \boxed{11} \quad & (3r - 7) + (17r - 6) \\ & = 3r - 7 + 17r - 6 \\ & = 20r - 13 \end{aligned}$$

$$\begin{aligned} \boxed{12} \quad & (-7f + 2) - (6f + 3) \\ & = -7f + 2 - 6f - 3 \\ & = -13f - 1 \end{aligned}$$

$$\begin{aligned} \boxed{13} \quad & (5x - 1) + (-3x - 1) \\ & = 5x - 1 - 3x - 1 \\ & = 2x - 2 \end{aligned}$$

$$\begin{aligned} \boxed{14} \quad & (-4x - 2y) - (4x + 2y) \\ & = -4x - 2y - 4x - 2y \\ & = -8x - 4y \end{aligned}$$

$$\begin{aligned} \boxed{15} \quad & (3.7x + 2) - (1.7x + 3) \\ & = 3.7x + 2 - 1.7x - 3 \\ & = 2x - 1 \end{aligned}$$

$$\begin{aligned} \boxed{17} \quad & (9v - 8w) - (8v - 9w) \\ & = 9v - 8w - 8v + 9w \\ & = v + w \end{aligned}$$

$$\begin{aligned} \boxed{18} \quad & (2a + 3) - (-4a + 5) + (6a - 7) \\ & = 2a + 3 + 4a - 5 + 6a - 7 \\ & = 12a - 9 \end{aligned}$$

$$\begin{aligned} \boxed{19} \quad & (9 + 4y) - (-1 + 8y) + (7 - y) \\ & = 9 + 4y + 1 - 8y + 7 - y \\ & = 17 - 5y \end{aligned}$$

$$\begin{aligned} \boxed{20} \quad & (1.1a + 1.2b) + (2a - 0.8b) \\ & = 1.1a + 1.2b + 2a - 0.8b \\ & = \underline{3.1a + 0.4b} \end{aligned}$$

$$\begin{aligned} \boxed{21} \quad & (5x + 5y) - (5x + 7y) \\ & = 5x + 5y - 5x - 7y \\ & = \underline{-2y} \end{aligned}$$

$$\begin{aligned} \boxed{22} \quad & (-x - y) + (-x - y) \\ & = -x - y - x - y \\ & = \underline{-2x - 2y} \end{aligned}$$

$$\begin{aligned} \boxed{23} \quad & (3.5m - 2.5n) + (2.7m - 3.7n) \\ & = 3.5m - 2.5n + 2.7m - 3.7n \\ & = \underline{6.2m - 6.2n} \end{aligned}$$

$$\begin{aligned} \boxed{24} \quad & (5p - 6r) - (p + r) \\ & = 5p - 6r - p - r \\ & = \underline{4p - 7r} \end{aligned}$$

$$\begin{aligned} \boxed{25} \quad & (2x + 7y) + (2x + 7y) \\ & = 2x + 7y + 2x + 7y \\ & = \underline{4x + 14y} \end{aligned}$$

$$\begin{aligned} \boxed{26} \quad & (515x + 755y) - (350x + 250y) \\ & = 515x + 755y - 350x - 250y \\ & = \underline{165x + 505y} \end{aligned}$$