

Simplifying Expressions

$$\begin{aligned}5r - 3r + 4k &= (5 - 3)r + 4k \\ &= 2r + 4k\end{aligned}$$

Combine like terms.

1. $6r + 5r - 8p + 6p + 7(2r - 4r)$

8. $12p + 5pd - 3p + 6pd$

2. $9x - 7x + 2x + 8(6x + 2x)$

9. $3(x - 5x) + 2(xy + 8x) + (-8xy)$

3. $5xy - 12xy + 12xy - 9(x + y)$

10. $-2a - 3(a + 7) - 4(-a + b)$

4. $2t + 12t - 4(n + 4n)$

11. $4n(x - y) + 3n(x + y) - 2$

5. $-2(g + 5g) + -4(8f - (-12g))$

12. $3(h - (-k)) + 2(-3h + -4k)$

6. $7(2x + 5y) + xy - 6(3xy + 5x)$

13. $8(2x + 2y) - 4(3xy - (-5x))$

7. $5m + 6mn - (-9n) + 2(m - n)$

14. $3c - 4bc + (-7b) + 3(2bc - b)$

6 Practice Solving More Equations

Directions: Solve the following equations by removing parentheses.

1. $5(x + 2) = 25$

7. $2x = 7 + 3(2 - x)$

2. $5(x + 3) = 6(x - 4)$

8. $-5(1 + x) = 8 - 4x$

3. $7(b + 2) = 28$

9. $2(4x + 11) = -3 + 3x$

4. $2(x + 3) - 4 = 8 + 6x$

10. $-7 - (-3 - 2x) = 10$

5. $4x + 3(x + 7) = 14$

11. $\frac{1}{2}(11x - 60) - 2x = x$

6. $3(2 + x) = -10 + 2x$

12. $4(x - 2) = 72$