

Expanding Expressions

Directions: Simplify each expression using the **Distributive Property**. Combine like terms wherever possible.

a. Distribute over three terms

1. $2(x + y + z) =$

2. $3(a + b + 4) =$

3. $5(m + 2n + 3) =$

4. $4(p + q + r) =$

b. Distribute with both addition and subtraction

5. $3(a - b + 2c) =$

6. $2(x + y - z) =$

7. $4(m - n + 1) =$

8. $5(p + 3 - q) =$

c. Nested parentheses (step-by-step distribution)

9. $2[(x + 3) + 4] =$

10. $3[(y - 2) + 5] =$

11. $4[(a + 1) - 3] =$

12. $5[(b + 2) + (3 - 1)] =$

d. Binomial times a constant

13. $6(2x + 3y) =$

14. $4(3a - 2b) =$

15. $5(4m + n) =$

16. $3(7p - 5q) =$

e. Two-step distribution and combination

17. $4(x + 2) - 3(x - 5) =$

18. $2(a - 3) + 5(a + 1) =$

19. $6(y + 2) - 2(y - 3) =$

20. $8(b + 4) - 6(b - 2) =$

