



This worksheet aims to develop your skills in breaking down and simplifying complex algebraic expressions. Work through each question carefully. Remember to show all your working for full credit.

Easy Questions

1. Simplify $3x + 4x$.
2. Simplify $7 + 2a - 3$.
3. Simplify $x - 2x$.
4. Simplify $a - (b - a)$.
5. Simplify $4y + 2 - y + 7$.

Intermediate Questions

6. Simplify $2x + 3 - 5x + 8$.
7. Simplify $4m - 2m + 7 - 3$.
8. Simplify $-3a + 2 - 4a - 5$.
9. Simplify $7x^2 - 2x^2 + 3x^2$.
10. Simplify $3a + 2b - a + 5b$.
11. Simplify $5 - (2 + x)$.
12. Simplify $2x + 3y - x + 4y$.
13. Simplify $4(x + 2) - x - 8$.
14. Simplify $2(3x + 4) - x$.
15. Simplify $3(x + 2) - 2(x + 2)$.
16. Simplify $2x + 3 - 3x + 5 - x$.
17. Simplify $(a + b) + (a - b)$.
18. Simplify $4p + 5q - 2p - 3q$.
19. Simplify $3(2x + 1) + 4(x - 2)$.
20. Simplify $7 - [3 - (2 - x)]$.

Hard Questions

21. Simplify $3x^2 + 5x - 2x^2 + 7 - x + 4$.
22. Simplify $5(a + b) - 3a + 2(b - 3)$.
23. Simplify $-2[3x - (2 - x)] + 4$.
24. Simplify $\frac{1}{2}x + \frac{3}{2} - \frac{1}{2}(x - 4)$.
25. Simplify $2[3x + 2(1 - x)] - 4x$.
26. Simplify $[2x + 3 - (x - 4)] + [5 - (3x + 2)]$.
27. Simplify $3[2(a - 1) + 4] - 2[3a - 5]$.
28. Simplify $-[x + 2(y - 3)] + 3x$.
29. Simplify $4 - [2 - (3 - (x + 1))]$.
30. Simplify $2[3x + 4 - (x + 2)] + (x + 5)$.