YEAR 6 · ALGEBRA

Simplifying Algebraic Expressions

Collect like terms to make each expression simpler.

Name _____ **Date** _____

> **Remember:** combine terms with the same letter. Keep unlike terms separate, and combine numbers on their own.

1 Collect like terms

Simplify each expression. Write your simplified expression after the equals sign.

1. $3a + 2a =$ _____
2. $8b - 3b =$ _____
3. $4x + x + 2x =$ _____
4. $9m - 2m + m =$ _____
5. $5p + 3q + 2p =$ _____
6. $7r + 4s - 2r =$ _____
7. $6c + 3d - c + 2d =$ _____
8. $10y - 4 + 2y + 7 =$ _____

2 Mixed expressions

Look carefully for matching letters and numbers on their own.

9. $5x + 3 + 2x + 4 =$ _____
10. $9a - 4b + 2a + b =$ _____
11. $12m - 5m + 3 - 1 =$ _____
12. $2p + 6q + 5p - 2q =$ _____
13. $14t - 6 + 2t + 9 =$ _____
14. $7u + 3v - 2u + 4v =$ _____

3 Put it into practice

15. Each of two blue ribbons is x cm long. A red ribbon is 3 cm longer than a blue ribbon. Write an expression for the total length of all three ribbons, then simplify it.

    Expression: _____

    Simplified: _____

16. One box contains n green counters and 2 yellow counters. A second box contains $3n$ green counters and 5 yellow counters. Write an expression for the total number of counters in both boxes, then simplify it.

    Expression: _____

    Simplified: _____

Check that you have combined only like terms.