YEAR 8 · ALGEBRA

Simplifying Algebraic Expressions

Name: _____ Date: _____

Simplify each expression by collecting like terms. Write your simplified expression on the line.

A. Collect like terms

Combine terms with the same letter.

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

B. Add and subtract

Keep track of each sign.

7. $12x - 7x + 2x$ = _____
8. $10a - 3a - 4$ = _____
9. $6m - 2 + 3m + 5$ = _____
10. $4r + 7 - 2r - 3$ = _____
11. $9p - 4q - 3p + q$ = _____
12. $5x - 2y - 3x + 6y$ = _____

C. Remove brackets, then simplify

Pay attention to the signs outside the brackets.

13. $8x - (3x + 2)$ = _____
14. $5a + (4 - 2a)$ = _____
15. $3m - (m - 6) - 2$ = _____
16. $2p + 5q - (p + 2q)$ = _____
17. $4y - (2y - 3) + (y + 1)$ = _____
18. $7b - (2b + 4) - (b - 3)$ = _____

Remember: you can only combine like terms. Keep unlike terms separate.