

Reteaching 2-3

Solving Multi-Step Equations

OBJECTIVE: Combining like terms

MATERIALS: None

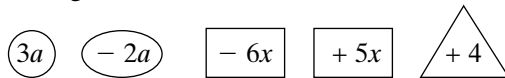
Example

Simplify $3a - 6x + 4 - 2a + 5x$ by combining like terms.

Ring each term that has the variable a . Draw a rectangle around each term that has the variable x , and a triangle around each constant term.



Group the like terms by reordering the terms so that all matching shapes are together.



Combine like terms by adding coefficients.

$$a - x + 4$$

Exercises

Draw circles, rectangles, and triangles to help you combine like terms and simplify each expression.

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|--------------------------------|-----------------------------|
| 1. $3a + 5 - x + 7x - 2a$ | 2. $2x - 5 + 3a - 5x + 10a$ |
| 3. $7b - b - x + 5 - 2x - 7b$ | 4. $-6m + 3t + 4 - 4m - 2t$ |
| 5. $2r + 3s - 5r$ | 6. $4 - p - 2x + 3p - 7x$ |
| 7. $3k - 2x + 6k + 5$ | 8. $3 + 2a - 7x + 2.5 + 5x$ |
| 9. $4a + 3 - 2y - 5a - 7 + 4y$ | 10. $c - 3 + 2x - 6c + 4x$ |

Simplify each expression.

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|---|---|
| 11. $2b + 2 - x + 4$ | 12. $-5 - c - 4 + 3c$ |
| 13. $\frac{1}{2}a - 5 - \frac{1}{2}a$ | 14. $1.5y - 1.5 + 0.5y + 0.5z + 1$ |
| 15. $6a + 3b - 2a + 4$ | 16. $\frac{2}{3}a + 5 - \frac{1}{3}a - 7$ |
| 17. $-8 + x - 2 + 3x$ | 18. $x + y - z + 4x - 5y + 2z$ |
| 19. $\frac{7}{8}x + 5 - \frac{3}{8}x - 4$ | 20. $10y - 3x + 5 - 8 - 2y$ |