



## Simplifying Algebraic Expressions

Name \_\_\_\_\_

Score \_\_\_\_\_

SAE:08

Simplify each algebraic expression.

$$1) \quad 2(a + b) - 3(a + b) + 5(2a - b)$$

$$2) \quad x(y - 4) + y(3 + x) - 5y + 2x$$

$$3) \quad 2(p^2 - q^2) - 5(q^2 - p^2)$$

$$4) \quad -n^3 + 2m^3 - 5mn + 4n^3 - 6m^3 + mn$$

$$5) \quad 3u^2 - 4v^3 + 6u^2 - 7v^3 - 1 + 8$$

$$6) \quad 7(g^4 + h^4) - 2h^4 + g^4$$

$$7) \quad 5c - 6 + 10d - 1 + 2c - d + 3$$

$$8) \quad 2(s + t) - 4(2t - 3s) + 11(t - s)$$



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## Answer key

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Score \_\_\_\_\_

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Simplify each algebraic expression.

$$1) \quad 2(a + b) - 3(a + b) + 5(2a - b)$$

$$\mathbf{9a - 6b}$$

$$2) \quad x(y - 4) + y(3 + x) - 5y + 2x$$

$$\mathbf{-2x + 2xy - 2y}$$

$$3) \quad 2(p^2 - q^2) - 5(q^2 - p^2)$$

$$\mathbf{7p^2 - 7q^2}$$

$$4) \quad -n^3 + 2m^3 - 5mn + 4n^3 - 6m^3 + mn$$

$$\mathbf{-4m^3 - 4mn + 3n^3}$$

$$5) \quad 3u^2 - 4v^3 + 6u^2 - 7v^3 - 1 + 8$$

$$\mathbf{9u^2 - 11v^3 + 7}$$

$$6) \quad 7(g^4 + h^4) - 2h^4 + g^4$$

$$\mathbf{8g^4 + 5h^4}$$

$$7) \quad 5c - 6 + 10d - 1 + 2c - d + 3$$

$$\mathbf{7c + 9d - 4}$$

$$8) \quad 2(s + t) - 4(2t - 3s) + 11(t - s)$$

$$\mathbf{3s + 5t}$$