

Simplifying by Collecting Like Terms

Simplify:

- (a) $x + x + y + y$
- (b) $a + a + b + a + b$
- (c) $2a + 3a + 4b + 2b$
- (d) $4x + x + y + 9y$
- (e) $6a + 3b + 2a + b$
- (f) $a + 2b + 4a + b + 5a$

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Simplify:

- (a) $a + a + a - a + b + b$
- (b) $5x - 2x + 3y + 4y$
- (c) $4c + 7c + 6d - 3d$
- (d) $8x - 6x + 3y - 2y$
- (e) $7a + 2b - 5a + 6b$
- (f) $10x + 8y - 3x - 5y$

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Simplify

- (a) $5p - 3q + 2 - 4p + 5 + 4q$
- (b) $4x^2 + 5x - 3x^2 - 2x$
- (c) $x^2 + y^3 - 2x^2 + 4y^3$
- (d) $x^2y + xy + x^2y$

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- (c) $x^2 + y^3 - 2x^2 + 4y^3$
- (d) $x^2y + xy + x^2y$

(a) A rectangle has a width x cm and a length $x + 5$ cm. Write down a simplified expression for its perimeter.

(b) A square has sides of length $2x - 3$ cm. Write down a simplified expression for its perimeter.

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