**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) $a+2b+4a+b+5a$

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) $10x+8y-3x-5y$

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) $x^{2}y+xy+x^{2}y$

(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.

A triangle has sides of lengths $ab+3, $ $2ab-7$ and $4ab+a$ cm. Write a simplified expression for the perimeter of the triangle.

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