**Simplifying by Collecting Like Terms**

Simplify

(a) $x+x+x+x$ (b) $5a+3a$

(c) $6b-4b$ (d) $4d-10d$

(e) $x-5x+2x$ (f) $c+c-2c$

(g) $3x+2x+3y-y$

(h) $3a+5c-a+2c$

(i) $p+q-q-p$

(j) $3x-x+3-2$

Simplify

(k) $5p-3q+2-4p+5+4q$

(l) $xy+yx$

(m) $3cd-4cd+2cd$

(n) $4y^{2}-3y^{2}$

(o) $-7ab-ab-2ab$

(p) $4x^{2}+5x-3x^{2}-2x$

(q) $x^{2}+y^{3}-2x^{2}+4y^{3}$

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

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

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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