## Expanding Single Brackets

Expand

(a) $4(x-3)$        (b) $2(3+4y)$

(c) $x(x+4)$        (d) $x(7-x)$

(e) $2x(x+9)$        (f) $x(y+3x)$

(g) $-2(4+x)$        (h) $-(x-6)$

(i) $-3x(6-x)$        (j) $-y(x+y)$

(k) $x^2(3x+y)$        (l) $2y^2(y-x)$

Expand and simplify

(a) $2(x+4)+5(x+7)$

(b) $3(a+2)+4(a-1)$

(c) $4(p-5)+6(p-1)$

(d) $2(x+8)-3(x+2)$

(e) $5(x-2)-2(x-9)$

(f) $3(2x+1)-4(x+5)$

(g) $2(3x+1)-(2x-3)$

(h) $2(p-4)+3(2p-1)$

Expand and simplify

(a) $x(x^2-2y)-3x^2(x+2y)$

(b) $a(a+2b+3c)+3c(a-2b+3c)$

(c) $a(b-c+d)-a(b-c+d)$

(d) $6+2(x+7)$

(e) $6+2(3-x)$

(f) $6-(2x+3)$

(a) A rectangle has a width $x$ cm and a length $x+5$ cm. Write a simplified expression for the area of the rectangle.

(b) A triangle has a base of $4x$ cm and a height of $(3x-5)$ cm. Find a simplified expression for the area of the triangle.