**Expanding Single Brackets**

Expand

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

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

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

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

(i) $-3x\left(6-x\right)$ (j) $–y\left(x+y\right)$

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

Expand and simplify

(a) $2\left(x+4\right)+5\left(x+7\right)$

(b) $3\left(a+2\right)+4(a-1)$

(c) $4\left(p-5\right)+6(p-1)$

(d) $2\left(x+8\right)-3\left(x+2\right)$

(e) $5\left(x-2\right)-2(x-9)$

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

(g) $2\left(3x+1\right)-\left(2x-3\right)$

(h) $2\left(p-4\right)+3(2p-1)$

Expand and simplify

(a) $x\left(x^{2}-2y\right)-3x^{2}(x+2y)$

(b) $a\left(a+2b+3c\right)+3c(a-2b+3c)$

(c) $a\left(b-c+d\right)-a(b-c+d)$

(d) $6+2\left(x+7\right)$

(e) $6+2\left(3-x\right)$

(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.

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