**Mixed Expanding Brackets**

Expand and simplify, where possible:

(a) $6\left(x+5\right)-4\left(3+x\right)$

(b) $\left(2y+5\right)\left(4-y\right)$

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

(d) $x\left(3x-2\right)-2x\left(1-x\right)$

(e) $\left(9-2b\right)\left(b+a\right)$

Expand and simplify, where possible:

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

(b) $20-3y\left(y+6\right)$

(c) $a\left(a+b\right)+5a-7ab$

(d) $\left(2c-5\right)\left(3c-1\right)+c^{2}$

(e) $x^{2}-16+(x+4)^{2}$

Expand and simplify, where possible:

(a) $4w\left(5-2w\right)-3\left(5-2w\right)-12$

(b) $\left(5-2w\right)\left(4w-3\right)-12$

(c) $\left(x-5\right)\left(x-2\right)+5\left(x-2\right)$

(d) $\left(5c-d\right)\left(3d-2c\right)-2\left(c+d\right)$

(e) $6\left(4-x\right)-(x+1)(x-1)$

Expand and simplify, where possible:

(a) $xy\left(5+x\right)+\left(y+x\right)\left(2y-x\right)+3xy$

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

(c) $\left(5y-1\right)\left(y+3\right)-(2y+3)(y+7)$

Come up with your own ‘expand and simplify’ question where the answer is $5x+18$ and the question contains:

(a) Two sets of single brackets

(b) One set of double brackets

(c) One set of double brackets and one set of single brackets

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