

EXPANDING DOUBLE BRACKETS

Task 1 – Expand and fully simplify.

- 1) $(x + 4)(x + 3)$
- 2) $(y + 6)(y + 4)$
- 3) $(h + 2)(h + 5)$
- 4) $(x + 5)(x + 1)$
- 5) $(a + 4)(a - 3)$
- 6) $(d + 1)(d - 7)$
- 7) $(m + 9)(m - 10)$
- 8) $(x + 7)(x - 5)$
- 9) $(u - 3)(u - 3)$
- 10) $(s + 5)(s - 5)$
- 11) $(g + 1)(g - 12)$
- 12) $(x + 11)(x + 13)$

Task 2 – Expand and fully simplify.

- 13) $(2x + 1)(x + 3)$
- 14) $(3x + 2)(x + 8)$
- 15) $(2x + 3)(x + 6)$
- 16) $(2y - 7)(y + 4)$
- 17) $(a + 2)(4a - 3)$
- 18) $(2b + 3)(3b - 8)$
- 19) $(2w + 1)(2w - 1)$
- 20) $(3v - 1)(2v - 7)$
- 21) $(10k + 1)(3k - 3)$
- 22) $(2x - 5)(5x - 3)$
- 23) $(12r + 5)(6r - 3)$
- 24) $(7a - 5)(6a - 15)$

Challenge

25) Expand and fully simplify

$$(x + 2)(x - 3) + (x + 3)(x - 4)$$

26) Expand and fully simplify

$$(x + a)(x - b) + (x + a)(x - b)$$

27) Expand and fully simplify

$$(x + 5)(x - 4) - (x + 4)(x - 3)$$

- 28) A rectangle has a width of $(2x + 5)$ cm. Given that the length is 3 cm longer than the width, and the area of the rectangle is 208 cm^2 , show that

$$4x^2 + 26x - 168 = 0$$