



In this worksheet you will learn to recognise patterns in binomial products and learn how to expand them effectively. Remember to use the distributive property (FOIL method) and combine like terms where possible.

## Easy Questions

1. Expand  $(x + 3)(x + 2)$ .
2. Expand  $(2a + 5)(a + 7)$ .
3. Expand  $(m + 4)(m - 2)$ .
4. Expand  $(2x + 1)(3x + 4)$ .
5. Expand  $(y + 6)(y - 3)$ .

## Intermediate Questions

6. Expand  $(3x + 2)(2x + 5)$ .
7. Expand  $(2a - 3)(a + 4)$ .
8. Expand  $(2x + 3)(x - 4)$ .
9. Expand  $(5y - 2)(3y + 7)$ .
10. Expand  $(4m + 1)(2m - 5)$ .
11. Expand  $(3a + 4)(5a - 2)$ .
12. Expand  $(x + 5)(2x - 3)$ .
13. Expand  $(3a - 2)(4a + 1)$ .
14. Expand  $(2x - 5)(3x - 1)$ .
15. Expand  $(4y + 3)(2y - 7)$ .
16. Expand  $(x - 2)(x + 6)$ .
17. Expand  $(2p + 1)(p + 3)$ .
18. Expand  $(3q - 5)(q + 2)$ .
19. Expand  $(2r + 7)(r - 3)$ .
20. Expand  $(x + 4)(3x - 2)$ .

## Hard Questions

21. Expand  $(3x + 2)(4x - 5)$ .
22. Expand and simplify  $(5a - 3)(2a + 7)$ .
23. Expand  $(a + b)(2a - 3b)$ .
24. Expand  $(2x + 3)(4x - 1)$ .
25. Expand  $(3y + 2)(2y - 4)$ .
26. Expand  $(6t - 1)(3t + 2)$ .
27. Expand  $(4x - 3)(2x - 7)$ .
28. Expand  $(2m + 5)(3m - 2)$  and verify your result by calculating for  $m = 4$ .
29. Expand  $(5z + 3)(3z + 4)$ .
30. Expand  $(2x - 3)(4x + 3)$ .