



This worksheet will help you practise expanding algebraic expressions using the distributive law and multiplying polynomials. Work through the questions carefully and show all your working.

## Easy Questions

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

## Intermediate Questions

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

## Hard Questions

21. Expand and simplify  $(2x + 3)(x - 4) - (x + 5)(x - 2)$ .
22. Expand  $(x - 2)(x + 3)(2x - 1)$ .
23. Expand  $(2x + 1)(3x + 2) + (x - 1)(4x - 3)$ .
24. Expand  $(x + 2)(x + 3) + (x - 4)(x + 5)$ .
25. Expand  $2(x - 3)(x + 4) - 3(x + 2)(x - 1)$ .
26. Expand  $(3x + 2)(2x^2 - 5x + 1) + (x - 1)(x^2 + 2x - 3)$ .
27. Expand  $(2x + 3)(x^2 - 2x + 4) - 2(x - 1)(x^2 + x - 2)$ .
28. Expand and simplify  $(x + 1)(2x - 3) + 3(x - 2)(x + 4) - 2(x + 3)(x + 3)$ .
29. Expand  $2(x + 5)(x - 2)(x + 1)$ .
30. Expand  $(2x - 1)(3x + 2)(x - 4)$ .