



In this worksheet you will practise expanding expressions using the distributive law and multiplying polynomials. Work through each question carefully and show all your working. Remember to simplify your answers fully.

## Easy Questions

1. Expand the expression  $2(x + 4)$ .
2. Expand the expression  $3(2x - 5)$ .
3. Expand the expression  $4(3 + x)$ .
4. Expand the expression  $-2(2x + 3)$ .
5. Expand the expression  $-3(5 - x)$ .

## Intermediate Questions

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

## Hard Questions

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