

The Wisdom Global School

Subject–Mathematics Topic – Multiplication of Algebraic expressions (Worksheet)

1.
$$(2x + 3)(x - 4)$$

2. $(a + 2)(a - 5)$
3. $(3y - 1)(2y + 7)$
4. $(x - 3)(x + 4)$
5. $(2a + 5)(3a - 2)$
6. $(4x - 1)(x + 2)$
7. $(y + 3)(y - 6)$
8. $(2a - 1)(a + 4)$
9. $(x + 2)(x - 5)$
10. $(3y - 2)(4y + 1)$
11. $(a - 3)(a + 6)$
12. $(2x + 1)(x - 3)$
13. $(4a - 2)(2a + 5)$
14. $(y - 1)(y + 4)$
15. $(2a + 3b)(4a - 3b)$
16. $(3y + 2)(2y - 3)$
17. $(a + 5)(a - 2)$
18. $(2x - 4)(x + 3)$
19. $(y - 3)(y + 6)$
20. $(3a + 2)(4a - 1)$
21. $(x - 2)(x + 5)$
22. $(4y - 1)(2y + 3)$
23. $(a + 4)(a - 3)$
24. $(2x - 1)(x + 3)$
25. $(5y - 2)(3y + 1)$
26. $(a - 2)(a + 5)$
27. $(3x + 1)(2x - 4)$
28. $(y + 2)(y - 7)$
29. $(2a - 3)(a + 6)$

31.
$$(4y+1)(2y-3)$$

32. $(a+3)(a-4)$
33. $(2x+4)(x-1)$
34. $(y-2)(y+5)$
35. $(3a-2)(4a+1)$
36. $(x-1)(x+2)$
37. $(4y-3)(2y+1)$
38. $(a+2)(a-3)$
39. $(2x-5)(x+3)$
40. $(y+1)(y-6)$
41. $(3a+1)(2a-4)$
42. $(x-4)(x+1)$
43. $(5y-2)(3y+4)$
44. $(a-1)(a+3)$
45. $(2x+2)(x-5)$
46. $(4y+1)(2y-2)$
47. $(a+3)(a-2)$
48. $(3x-2)(2x+5)$
49. $(y-4)(y+2)$
50. $(2a+1)(a-3)$
1. $(a+b)(x^2+2x+1)$
2. $(2x-3)(y^2+4y-1)$
3. $(p-2q)(3p^2+pq+1)$
4. $(m+3)(2m^2-5m+2)$
5. $(2a+b)(4a^2-3ab+b^2)$
6. $(x-1)(y^2+3y+2)$
7. $(3p+q)(2p^2-4pq+q^2)$
8. $(m-2)(5m^2+2m-1)$
9. $(a+2b)(3a^2+2ab-b^2)$
10. $(2x+1)(y^2-y+4)$

1.
$$(a-b)(2x^2+3x-1)$$

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

- Q21. If the length of a rectangle is 2a+5 meters and the width is 3a-2 meters, find the algebraic expression for the area of the rectangle.
- Q22. If the side length is represented by 4c-1, find the algebraic expression for the volume of the cube.
- Q23. A farmer has a field with a length given by 6x+2 meters and a width given by 4x-3 meters. Calculate the algebraic expression for the total area of the field.
- Q24. The expression 3m-5 represents the profit earned from selling each product, and 2m+4 represents the number of products sold. Find the algebraic expression for the total profit.
- Q25. A rectangular prism has dimensions l = 2p+3, b = p-1, and h=3p. Determine the algebraic expression for the volume of the prism.
- Q26. The length of a rectangle is n+4, and the width is 2n-1. Calculate the algebraic expression for the area of the rectangle.
- Q27. The expression 8s+3 represents the cost of producing each shirt, and 6s-2 represents the number of shirts produced. Find the algebraic expression for the total cost.

- Q28. In a triangle b is the base and h is the height. If the base is represented by 3a and the height by 2a+1, find the algebraic expression for the area.
- Q29. The expression 7n-3 represents the revenue from selling each book, and 4n+2 represents the number of books sold. Find the algebraic expression for the total revenue.
- Q30. The length of a rectangle is x^2+3y meters, and the width is x^2-2y meters. Calculate the algebraic expression for the total area of the rectangle.

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