

PRODOTTI NOTEVOLI

PRODOTTO DELLA SOMMA DI DUE MONOMI PER LA LORO DIFFERENZA

1. $(a - 2b)(a + 2b) = \left(\frac{1}{2}a + 3b\right)\left(-\frac{1}{2}a + 3b\right) =$
2. $(2a + 1)(2a - 1) = (-3x - y)(-3x + y) =$
3. $(2x - 4y)(-2x - 4y) = (2 - x)(x + 2) =$
4. $(-x - y)(-x + y) = (-x^2 - y^2)(x^2 - y^2) =$
5. $(-3x - 2y)(3x - 2y) = (x - 0,1)(0,1 + x) =$
6. $(-a - b)(a - b)(a^2 + b^2) = (2x^n + y^3)(-2x^n + y^3) =$
7. $(a^n - 2)(a^n + 2) = (x^{n+1} - 1)(x^{n+1} + 1) =$
8. $(1 - a^n)(a^n + 1) = (x^{2n+3} - y^m)(x^{2n+3} + y^m) =$
9. $(2a^m - b^{3n})(2a^m + b^{3n}) = (x^n - y)(-x^n - y) =$
10. $(a^{n-m} + a)(a^{n-m} - a) =$
11. $(a + b)(a - b)(a^2 + b^2)(a^4 + b^4) =$
12. $(x^2 + 2)(x^2 - 2)(x^4 + 4)(x^8 + 16) =$
13. $\left(-\frac{1}{3}x - 2\right)\left(\frac{1}{3}x - 2\right)\left(\frac{1}{9}x^2 + 4\right) =$
14. $[(a - b)(a + b)]^2 =$
15. $[(x - 3y)(x + 3y)]^2 =$
16. $(a - 2)^2(a + 2)^2 =$
17. $[(x^3 - 3ax^2)(x^3 + 3ax^2)]^2 =$
18. $\left[\left(-\frac{1}{3} - a^5\right)\left(-\frac{1}{3} + a^5\right)\right]^2 =$
19. $(x^2 - y)^2(-x^2 - y)^2 =$
20. $[x + (x^2 - 1)][x - (x^2 - 1)] =$
21. $[(x + y) + 4][(x + y) - 4] =$
22. $[x^2 + (y^2 - z)][x^2 - (y^2 - z)] =$
23. $(x^2 + y^2 - z)(x^2 + y^2 + z) =$
24. $(x^2 + 3xy - z^2)(x^2 - 3xy + z^2) =$
25. $(x^2 + 3xy - z^2)(x^2 - 3xy - z^2) =$
26. $(x^2 + 3xy + z^2)(x^2 - 3xy - z^2) =$
27. $(1 - 3x + y)(1 + 3x - y) =$
28. $(a^2 - a + b^2)(a^2 + a - b^2) =$
29. $\left(-\frac{2}{3} + a - \frac{b}{2}\right)\left(-\frac{b}{2} + \frac{2}{3} - a\right) =$
30. $(a + a^2 + a^3)(a^3 - a^2 + a) =$
31. $[a + (b - c)][a - (b - c)] =$
32. $[(a^2 - 3c) + 1][(a^2 - 3c) - 1] =$

ESPRESIONI

33. $3(a^2 + 2b)(a^2 - 2b) - 2(2a^2 + 3b)(2a^2 - 3b) =$
34. $(0,2x - y^3)(0,2x + y^3) - (0,1x + 3y^3)(0,1x - 3y^3) =$
35. $(2ab + 3a^2b^3)(2ab - 3a^2b^3) : (-3ab^2) =$
36. $(3a^3b^2 - 6a^4b^3) : (-3a^3b^2) \cdot (1 + 2ab) =$
37. $(1 - 3x^2)[(4x^3 + 12x^5) : (-4x^3)] =$
38. $(2a - 5b)(2a + 5b) + (a - 3b)^2 + (a + 4b)(-a + 4b) =$
39. $(x + 2y)(x - 2y) - (2x - 3y)^2 + (-x - 5y)^2 =$
40. $(a^2 - 1)(1 + a^2) - (a^2 - 2)^2 + [(a + 1)(a - 1)]^2 - (a^2 - 2)(a^2 + 2) =$
41. $a^2(x - 1)^2 + (ax + 3)(3 - ax) + 2x\left(a - \frac{3}{2}\right)^2 - (a - 3)^2 =$
42. $9x^2\left(\frac{1}{3}y - x^2\right)\left(\frac{1}{3}y + x^2\right) + (3x^3 + 2xy)^2 - 5(-xy)^2 =$
43. $[x^4(3x + 4)^2 : (-2x)^3 + 2x] : (-3x)^2 - x\left(-\frac{1}{2}\right)^3 + \frac{1}{3} =$
44. $\left[(a^8 - a^{12} - a^{16}) : \left(-\frac{1}{2}a^8\right) + 2\right]^2 : [-2(-a)^4]^2 - (-a^2)^2(a^4 + 2) =$
45. $[a(a - b) - b(b - a)]^2 - 2(a - b)^2(a + b)^2 + a^2(a^2 - 2b^2) =$
46. $(x^2 + x + 1)(x^2 - x + 1) - x^2(x^2 + 1) =$
47. $\left\{(3x^2 + xy - xz)(3x^2 - xy - xz) : (3x^2) + \frac{1}{3}(y - z)(y + z)\right\} : (-x) =$
48. $[(3a - 2b)^2 - (2b + 9a^2)^2 + 12ab] : [(3a - 2b)(3a + 2b) + 4b^2] =$
49. $(1 - x - y + x^2)(1 - x + x^2 + y) + (2x^2 - 1)(2x^2 + 1) + 2x(1 + x)^2 =$
50. $3y(x - y)^2 + (x - y)(x + y)(2x - y) - (x - 2y)(x + 2y)(2x - y) =$

CUBO DI UN BINOMIO

51. $(2a + 1)^3 =$ $(2a + b)^3 =$
52. $\left(2x - \frac{1}{3}y\right)^3 =$ $(ab + 1)^3 =$
53. $[(ax^3 - x^2)(ax^3 + x^2)]^3 =$
54. $[(1 - x^3)(1 + x^3)]^3 =$
55. $\left[\left(a - \frac{1}{3}b\right)\left(a + \frac{1}{3}b\right)\right]^3 =$
56. $\left[\left(\frac{2}{3}x^2 - \frac{3}{2}y^3\right)\left(\frac{2}{3}x^2 + \frac{3}{2}y^3\right)\right]^3 =$
57. $[(1 + x^3)^3]^2 =$
58. $[(2 - x^3)^3]^2 =$

59. $(a^3 - 1)^3 (a^3 + 1)^3 =$

ESPRESSIONI

60. $(x - a)^3 - (2x + a)^3 + (2a - x)^3 =$

61. $(a - 3b)^3 + (2a + 3b)^3 + (a - 2b)(a^2 + b^2) =$

62. $(2a + 3y)^3 - (2a - 3y)^3 - 54y^3 =$

63. $(a + 3)^3 + 2(a^2 + 3)(a - 3) + (a - 3)^3 =$

64. $\left(\frac{1}{2} - x^2\right)^3 - (2x^2 - 1)^3 - (x - 2)^3 (x + 2)^3 =$