

## PRODOTTI NOTEVOLI

### ESPRESSIONI

1.  $(a - b)^2 - (a - 2b)^2 + (a - b)(a + 2b) =$
2.  $(x - 2y)^2 + (x - 3y)(x + 3y) - (x + 2y)(x - 3y) =$
3.  $(a - 1)^2 + (2a - 1)(2a + 1) - (-2a + 1)(-2a - 1) + 2a =$
4.  $\left(2a - \frac{1}{2}\right)\left(2a + \frac{1}{2}\right) + \left(1 - \frac{1}{2}a\right)^2 - \left(\frac{a}{2} - 2\right)\left(\frac{a}{2} + 2\right) + a =$
5.  $(2a - x)(2a + x) + (a - 2x)^2 - (x - 2a)^2 =$
6.  $(2a^2 - 1)(a + 1) + (3a + 2)(2 - 3a) - 2a^3 + 7a(a - 1) =$
7.  $4(a + b)^2 + (-2a + b)^2 - b^2 - (a + 2b)^2 =$
8.  $(2 + a - b)(2 - a + b) + (a - b)^2 =$
9.  $(x + y + z)^2 + (x - y)^2 + (y - z)^2 + (z - x)^2 =$
10.  $(a - 2b)^2(a + 2b)^2 - (a^2 - ab - b^2)(a^2 - ab + b^2) + (-3ab)^2 =$
11.  $(x + 2y)^3 - (x - 2y)^3 - 3y(-2x)^2 =$
12.  $(a^2 - 1)(a^2 + 1)(a^2 + 2) - (a^2 - 1)^3 - (2a^2 - 1)^2 =$
13.  $(a + b + c)(a + b - c) - (a - b + c)(b + c - a) + (a + b + c)^2 =$
14.  $(-x + y + z + t)(x - y + z + t) + (x + y - z + t)(x + y + z - t) =$
15.  $(a - b)^3 + 3(a - b)^2(a + b) + 3(a - b)(a + b)^2 + (a + b)^3 =$
16.  $3(x - y)^2(x + y) + 3(x + y)^2(y - x) - 6y(x + y)(-x + y) =$
17.  $[x^2 + 2(x - 1)]^2 - 4x^2(x - 1) - [2(x - 1)]^2 - (x^2 - 1)^2 =$
18.  $(a^2 - 2a)^3 + a(2a^2 + 3a)^2 - 2a^3\left(2a - \frac{1}{2}\right)^2 - a^4(a + 2)(a - 12) =$
19.  $\left\{\left[2a^2 - \left(a - \frac{1}{2}b\right)\left(a + \frac{1}{2}b\right)\right]^2 - \frac{1}{16}b^4\right\}^2 - \left[\frac{1}{2}a^2(2a^2 + b^2)\right]^2 =$
20.  $\left(y - \frac{1}{2}x\right)^3 - \left(-\frac{1}{2}x - y\right)^3 - 6\left[y\left(\frac{1}{2}x - y\right)^2 + x(-y)^2\right] =$
21.  $5b\left(1 + \frac{1}{4}b\right) + (b^2 + b - 1)^2 - (b + 1)^3 - b^2\left(b + \frac{1}{2}\right) =$
22.  $3a^2b^2 - (a^2 - 3b^2)^2 - b^2\left(2a - \frac{1}{4}b\right)^2 + \left[\left(a - \frac{1}{2}b\right)\left(a + \frac{1}{2}b\right)\right]^2 =$
23.  $\{[(x + 3a)(x + 2a) - (x - 3a)^2] : (-3a)\}^2 - a(a - 7x) =$
24.  $[a^2(a - 1) - a(a^2 + 1)]^2 - a^2(a + 1)^2 + \left(-\frac{1}{2}a\right)^3 =$