Espressioni con i prodotti notevoli

1. $(x + 1)(x - 1) + 1 =$ $\qquad$ $[x^2]$

2. $(a + 1)^2 - 2a =$ $\qquad$ $[a^2 + 1]$

3. $(b + 1)^2 - (+2b)^2 - 1 =$ $\qquad$ $[-3b^2 + 2b]$

4. $(y + 4)(y - 4) - 4(y - 4) =$ $\qquad$ $[y^2 - 4y]$

5. $(x + 3)(x - 3) - 2x^2 =$ $\qquad$ $[-x^2 - 9]$

6. $(x - 1)(x + 1) + (x + 1)^2 =$ $\qquad$ $[2x^2 + 2x]$

7. $(2a + 1)^2 + (a - 2)^2 =$ $\qquad$ $[5a^2 + 5]$

8. $x^4(x - 1) + (x^2 + 2)(x^2 - 2) =$ $\qquad$ $[x^5 - 4]$

9. $(a + b + 1)^2 - 2(ab + b + a) =$ $\qquad$ $[a^2 + b^2 + 1]$

10. $(xy + 5)(xy - 5) - (xy + 2)^2 =$ $\qquad$ $[-4xy - 29]$

11. $(a + 1)^3 - 3a(a + 1) - 1 =$ $\qquad$ $[a^3]$

12. $(xy + 2)(xy - 2) - (x + 2)(x - 2) =$ $\qquad$ $[x^2y^2 - x^2]$

13. $(a^3 + a) : a - (a - 1)(a + 1) =$ $\qquad$ $[2]$

14. $(x - 2)^3 - (x^5 - 5x^4 + 12x^3) : x^2 =$ $\qquad$ $[-x^2 - 8]$

15. $(ab + 2)^2 - ab(ab - 1) + 5ab =$ $\qquad$ $[10ab + 4]$

16. $(x^2 - y + 1)^2 - (2x + x^3 - 2xy)x =$ $\qquad$ $[y^2 + 1 - 2y]$

17. $(a - 2)^2 - (a + 1 - 2b)^2 + 4b(b - 1) =$ $\qquad$ $[-6a + 3 + 4ab)]$

18. $(x^2 - 1)^3 - (x^3 + 3)(x^3 - 3) - 3x^2 =$ $\qquad$ $[-3x^4 + 8]$

19. $-(3 + a^2)(3 - a^2) - (a^2 - 2b - 3)^2 + 18 + 12b =$ $\qquad$ $[-4b^2 + 4a^2b + 6a^2]$

20. $(x + 1)(x - 1) + (x + 1)^2 - (x + 2)(x - 2) =$ $\qquad$ $[x^2 + 2x + 4]$