Solucions Identitats Notables

$(a + b)^2 = a^2 + 2ab + b^2$

1. $(x + 3)^2 = x^2 + 6x + 9$
2. $(x + 1)^2 = x^2 + 2x + 1$
3. $(2x + 5)^2 = 4x^2 + 20x + 25$
4. $(3x + 4)^2 = 9x^2 + 24x + 16$
5. $(x - 2)^2 = x^2 - 4x + 4$
6. $(x - 7)^2 = x^2 - 14x + 49$
7. $(6x - 1)^2 = 36x^2 - 12x + 1$
8. $(-2x + 3)^2 = 4x^2 - 12x + 9$
9. $(-x + 5)^2 = x^2 - 10x + 25$
10. $(9x^2 - 2)^2 = 81x^4 - 36x^2 + 4$
11. $(5x^3 + 6x)^2 = 25x^6 + 60x^4 + 36x^2$
12. $(-4x - 3)^2 = 16x^2 + 24x + 9$
13. $(5x + 2)^2 = 25x^2 + 20x + 4$
14. $(3x - 6)^2 = 9x^2 - 36x + 36$
15. $(2x + 1)^2 = 4x^2 + 4x + 1$
16. $(-4x^3 - x^5)^2 = 16x^6 + 8x^8 + x^{10}$
17. $(x + 2)^2 = x^2 + 4x + 4$
18. $(-3 + x)^2 = 9 - 6x + x^2$
19. $(x - 3)^2 = x^2 - 6x + 9$
20. $(x - 1)^2 = x^2 - 2x + 1$

$a^2 + 2ab + b^2 = (a + b)^2$

1. $x^2 + 2x + 1 = (x + 1)^2$
2. $x^2 + 14x + 49 = (x + 7)^2$
3. $x^2 + 22x + 121 = (x + 11)^2$
4. $x^2 + 4x + 4 = (x + 2)^2$
5. $x^2 + 16x + 64 = (x + 8)^2$
6. $x^2 - 10x + 25 = (x - 5)^2$
7. $x^2 - 6x + 9 = (x - 3)^2$
8. $x^2 - 8x + 16 = (x - 4)^2$
9. $x^2 - 12x + 36 = (x - 6)^2$
10. $x^2 - 18x + 81 = (x - 9)^2$
11. $4x^2 + 4x + 1 = (2x + 1)^2$
12. $4x^2 + 12x + 9 = (2x + 3)^2$
13. $25x^2 - 40x + 16 = (5x - 4)^2$
14. $49x^2 - 14x + 1 = (7x - 1)^2$
15. $16x^2 - 24x + 9 = (4x - 3)^2$
16. $2x^2 - 4x + 1$ = No es pot
17. $4x^6 + 20x^3 + 25 = (2x^3 + 5)^2$
18. $x^2 + x + 1$ = No es pot
19. $x^2 - 2x + 1 = (x - 1)^2$
20. $x^2 - 2x - 1$ = No es pot
21. $9x^2 + 12x + 4 = (3x + 2)^2$
22. $5x^2 - 10x + 1$ = No es pot
23. $49x^6 - 42x^4 + 9x^2 = (7x^3 - 3x)^2$
24. $25x^2 - 30x + 9 = (5x - 3)^2$

$(a + b)(a - b) = a^2 - b^2$

1. $(x + 1)(x - 1) = x^2 - 1$
2. $(2x + 5)(2x - 5) = 4x^2 - 25$
3. $(x - 3)(x + 3) = x^2 - 9$
4. $(x + 6)(x - 6) = x^2 - 36$
5. $(x + 8)(x - 8) = x^2 - 64$
6. $(5x - 1)(5x + 1) = 25x^2 - 1$
7. $(x + 11)(x - 11) = x^2 - 121$
8. $(x + 4)(x - 4) = x^2 - 16$
9. $(x + 7)(x - 7) = x^2 - 49$
10. $(3x - 1)(3x + 1) = 9x^2 - 1$
11. $(-x + 9)(x + 9) = 81 - x^2$
12. $(x + 10)(-x + 10) = 100 - x^2$
13. $(7x + 2)(-7x + 2) = 4 - 49x^2$
14. $(-x + 5)(-x + 5) = x^2 - 10x + 25$
15. $(4x^3 - 7)(4x^3 + 7) = 16x^6 - 49$
16. $(2x^4 + 3x)(2x^4 - 3x) = 4x^8 - 9x^2$
17. $(3x^2 + 2)(3x^2 + 2) = 9x^4 + 12x^2 + 4$
18. $(5x - 1)(5x + 1) = 25x^2 - 1$
19. $(x^5 - 1)(x^5 + 1) = x^{10} - 1$
20. $(x^2 + 1)(x^2 - 1) = x^4 - 1$

$a^2 - b^2 = (a + b)(a - b)$

1. $x^2 - 100 = (x + 10)(x - 10)$
2. $x^2 - 1 = (x + 1)(x - 1)$
3. $x^2 - 9 = (x + 3)(x - 3)$
4. $4x^2 - 25 = (2x + 5)(2x - 5)$
5. $9x^2 - 36 = (3x + 6)(3x - 6)$
6. $100x^2 - 4 = (10x + 2)(10x - 2)$
7. $4x^6 - 25 = (2x^3 + 5)(2x^3 - 5)$
8. $x^2 + 4$ = No es pot
9. $-x^2 + 16 = 16 - x^2 = (4 + x)(4 - x)$
10. $25x^2 - 9 = (5x + 3)(5x - 3)$
11. $x^2 - 7 = (x + \sqrt{7})(x - \sqrt{7})$