

Ontbind in factoren.

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

2) $p^2 - q^2 = (p+q)(p-q)$

3) $x^2 - y^2 = (x+y)(x-y)$

4) $a^2 - 4 = (a+2)(a-2)$

5) $a^2 - 9 = (a+3)(a-3)$

11) $a^2 - 64b^2 = (a+8b)(a-8b)$

12) $1 - r^2 = (1+r)(1-r)$

13) $x^2 - 225y^2 = (x+15y)(x-15y)$

14) $36a^2 - b^2 = (6a+b)(6a-b)$

15) $a^2 - b^2c^2 = (a+bc)(a-bc)$

21) $a^4 - b^4 = (a^2+b^2)(a^2-b^2)$

22) $x^4 - 9 = (x^2+3)(x^2-3)$

23) $p^4 - 16q^4r^4 = (p^2+4q^2r^2)(p^2-4q^2r^2)$

24) $x^8y^8 - 1 = (x^4y^4+1)(x^4y^4-1)$

25) $a^8 - b^8 = (a^4+b^4)(a^4-b^4)$

6) $25 - x^2 = (5+x)(5-x)$

7) $c^2 - 49 = (c+7)(c-7)$

8) $81 - x^2 = (9+x)(9-x)$

9) $400 - c^2 = (20+c)(20-c)$

10) $u^2 - v^2 = (u+v)(u-v)$

16) $a^2b^2 - c^2d^2 = (ab+cd)(ab-cd)$

17) $49p^2q^2 - 169r^2s^2 = (7pq+13rs)(7pq-13rs)$

18) $25p^2 - 81q^2 = (5p+9q)(5p-9q)$

19) $1 - b^2c^2 = (1+bc)(1-bc)$

20) $4 - 4a^2 = 4(1-a^2) = 4(1+a)(1-a)$

26) $xa^4 - xb^4 = x(a^4 - b^4) = x(a^2+b^2)(a^2-b^2)$

27) $a^5 - ab^4 = a(a^4 - b^4) = a(a^2+b^2)(a^2-b^2)$

28) $2a^5b - 32ab = 2ab(a^4 - 16) = 2ab(a^2+4)(a^2-4)$

29) $-8x^2 + 2y^2 = -2(4x^2 - y^2) = -2(2x+y)(2x-y)$

30) $x^9y^9 - xy = xy(x^8y^8 - 1) = xy(x^4y^4+1)(x^4y^4-1)$

