

Ontbind zo ver mogelijk in factoren.

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

$$16a^2 - 25b^2 = (4a + 5b)(4a - 5b)$$

$$\frac{1}{4}a^4b^2 - \frac{81}{121}c^{14}d^{10} = \left(\frac{1}{2}a^2b + \frac{9}{11}c^7d^5\right)\left(\frac{1}{2}a^2b - \frac{9}{11}c^7d^5\right)$$

$$\begin{aligned} p^{16} - q^{16} &= (p^8 + q^8)(p^8 - q^8) \\ &= (p^8 + q^8)(p^4 + q^4)(p^4 - q^4) \\ &= (p^8 + q^8)(p^4 + q^4)(p^2 + q^2)(p^2 - q^2) \\ &= (p^8 + q^8)(p^4 + q^4)(p^2 + q^2)(p + q)(p - q) \end{aligned}$$

$$0,49x^2 - 0,25y^2 = (0,7x + 0,5y)(0,7x - 0,5y)$$

$$\begin{aligned} 18x^4 - 32y^4 &= 2(9x^4 - 16y^4) \\ &= 2(3x^2 + 4y^2)(3x^2 - 4y^2) \\ &= 2(3x^2 + 4y^2)(\sqrt{3}x + 2y)(\sqrt{3}x - 2y) \end{aligned}$$

$$a^{2p+2} - b^{4q-2} = (a^{p+1} + b^{2q-1})(a^{p+1} - b^{2q-1})$$

$$\begin{aligned} (2a + b)^2 - (4a - b)^2 &= [(2a + b) + (4a - b)][(2a + b) - (4a - b)] \\ &= (2a + b + 4a - b)(2a + b - 4a + b) \\ &= 6a(-2a + 2b) \end{aligned}$$

$$\begin{aligned} (3x - 1)^2 - 9 &= (3x - 1 + 3)(3x - 1 - 3) \\ &= (3x + 2)(3x - 4) \end{aligned}$$