

ESERCIZI: scomponi

1. $(x^2 - 1) = (x - 1)(x + 1)$

2. $(x^4 - 16x^2) = x^2(x^2 - 16) = x^2(x + 4)(x - 4)$

3. $(x^4 + 3x^3) = x^3(x + 3)$

4. $(x^2 + 1 + 2x) = (x + 1)^2 = (x + 1)(x + 1)$

5. $(5x^3 + 5) = \text{nessun racc.}$

6. $(25a^2b^2 - 9) = (5ab - 3)(5ab + 3)$

7. $(9x^4 + 3x^3) = 3x^3(3x + 1)$

8. $\left(\frac{49}{4}x^6 - 9x^4\right) = x^4\left(\frac{49}{4}x^2 - 9\right) = x^4\left(\frac{7}{2}x + 3\right)\left(\frac{7}{2}x - 3\right)$

9. $(4x^2 + 4x + 1) =$

quadrati: $4x^2 = 2x \quad e \quad 1 = 1$

$$(2x + 1)^2 = (2x + 1)(2x + 1)$$

10. $(16x^4 + 9x^2 + 24x^3) = (4x^2 + 3x)^2$

11. $\left(\frac{4}{9}x^4 - \frac{1}{6}a^2\right) = \text{nessun racc.}$

Esercizi: calcola il dominio

12. $\frac{x+3}{x-2} = 0 \quad x - 2 \neq 0 \quad x \neq 2$

13. $\sqrt{x^2 - 1} = 0 \quad x^2 - 1 \geq 0 \quad x^2 \geq 1 \quad x \geq \pm 1$

14. $\frac{x+1}{2x+3} = 0 \quad 2x + 3 \neq 0 \quad 2x \neq -3 \quad x \neq -\frac{3}{2}$

15. $\sqrt{\frac{x+1}{x-1}} = 0 \quad \frac{x+1}{x-1} \geq 0 \quad e \quad x - 1 \neq 0$