

VERIFICA DI MATEMATICA

18-03-2026

Espressioni nei 4 insiemi numerici + Calcolo letterale

Classe: Biennio

Risolvi le seguenti espressioni

$$29) \quad 0,1\bar{3} : \left(\frac{1}{6} - \frac{1}{5}\right) - \left(\frac{1}{2}\right)^2 \cdot \left(\frac{1}{3} + 1\right) + (1,5 + 1)^{-1} : (-2)^2 + 4 \quad \left[-\frac{7}{30}\right]$$

$$30) \quad \left(\frac{1}{2}\right)^3 : \left(\frac{1}{2} - \frac{1}{4}\right) - \left(0,2 + \frac{1}{5}\right) \cdot (-5)^2 + \left(1,2 - \frac{1}{9}\right) \cdot \left(\frac{1}{3}\right)^{-2} \quad \left[\frac{1}{2}\right]$$

$$31) \quad \left(\frac{2}{5} - \frac{1}{3}\right) \cdot \left(\frac{1}{5}\right)^{-1} - \left(2 - \frac{1}{2}\right)^2 : \left(-\frac{1}{2}\right)^2 + 2^0 \quad \left[-\frac{23}{3}\right]$$

$$\sqrt{\frac{2\sqrt{3}-3}{\sqrt{3}}} \cdot (2-\sqrt{3}) \cdot (2+\sqrt{3}) \quad \left|\quad \frac{\sqrt{6}-\sqrt{2}}{2}\right.$$

$$\frac{\sqrt{2-\sqrt{2}}}{\sqrt{2+\sqrt{2}}} \cdot \frac{\sqrt{3+\sqrt{7}}}{\sqrt{3-\sqrt{7}}} \cdot (3-\sqrt{7}) \quad \left|\quad 2-\sqrt{2}\right.$$

$$(x+a+2)^2 - (x+a)^2 - 4(2+x+a) \quad \left[-4\right]$$

$$(a+1+2y)^2 - (a-1)(a+1) - (1+2y)^2 - 2a \quad \left[1+4ay\right]$$

$$a^3 - (-b)^3 - (a+b)^3 - \frac{1}{3}a(3b+1)(1-3b) \quad \left[-3a^2b - \frac{1}{3}a\right]$$

$$(x-2y)^3 - (2x-y)^3 - 6xy(x+y) + 7y^3 + 8x^3 \quad \left[x^3\right]$$

$$\frac{\sqrt{a-b}}{\sqrt{a+b} + \sqrt{a-b}} - \frac{\sqrt{a-b}}{\sqrt{a+b} - \sqrt{a-b}} \quad \left|\quad \frac{b-a}{b}\right.$$

$$\frac{3\sqrt{a} + 2\sqrt{x}}{3\sqrt{a} - 2\sqrt{x}} - \frac{3\sqrt{a} - 2\sqrt{x}}{3\sqrt{a} + 2\sqrt{x}} - \frac{24\sqrt{ax}}{9a - 4x} \quad \left|\quad 0\right.$$