

Esercizi

Calcolo espressioni

$$1) \left(\left(\left(\left(-\frac{1}{3} \right)^{-3} - \left(\frac{1}{4} \right)^{-2} + \left(\frac{1}{3} \right)^{-2} - \left(-\frac{1}{5} \right)^0 \right) : 6^2 - (-6)^2 \right)^2 : \left(-\frac{4}{5} \right)^0 = \left(\frac{37}{36} + 36 \right)^2$$

Verifica con Derive:

$$\frac{\left[\frac{\left(-\frac{1}{3} \right)^{-3} - \left(\frac{1}{4} \right)^{-2} + \left(\frac{1}{3} \right)^{-2} - \left(-\frac{1}{5} \right)^0}{6^2} - (-6)^2 \right]^2}{\left(-\frac{4}{5} \right)^0} = \frac{1771561}{1296}$$

$$\left(\frac{35}{36} + 36 \right)^2 = \frac{1771561}{1296}$$

$$2) \frac{-\frac{1}{2}(3+(-2)^{-2})}{(-3)^{-3} \cdot (-12)^2 + \frac{2}{3} \cdot \left(-\frac{7}{21} - \frac{10}{25} - \frac{4}{15} \right)} + \frac{3}{2} \cdot (-2)^{-3} = \frac{1}{12}$$

$$3) \frac{(-1)^0 + (-1) + (-1)^2 + (-1)^3 + (-1)^4 + (-1)^5 + (-1)^6}{\left((2^2)^5 : (-2)^5 + (-3)^{12} : \left((3^4)^2 - ((+7)^2)^3 : ((-7)^2)^2 \right)} =$$

$$4) \frac{\left(-1 - \frac{1}{3} \right)^{-2} - 2 \left(\frac{5}{8} - \frac{1}{4} \right) + (-2)^{-2}}{(-4)^{-1}} + \left(\frac{2}{3} - 6^{-1} \right) - (-2)^{-2} = 0$$

$$5) \frac{3^{-2} : \left(\frac{1}{3} \right)^{-1} \cdot 3^2}{\left(1 - \frac{1}{3} \right)^3 : \left(\frac{3}{2} \right)^{-4} : \left(\frac{4}{9} \right)^{-1}} + \frac{5^3 : \left(\frac{1}{5} \right)^{-2} - 4 \cdot \left(\frac{1}{2} \right)^{-4}}{(2^5)^{-3} \cdot \left((2^4)^2 \right)^2} + \frac{\left(\frac{1}{2} \right)^{-4}}{\left(\frac{1}{2} \right)^{-6}} = \frac{5}{4}$$