

Calcolare le seguenti espressioni in \mathbb{Q} :

$$\begin{aligned} & \left[1 - \left(\frac{3}{2} - 1 \right) + 2 \right] - \left[\left(\frac{4}{3} + 1 \right) + 1 \right] - \left\{ - \left[- \left(-\frac{1}{3} + \frac{1}{2} \right) \right] \right\} = \\ & \left\{ \left(\frac{2}{3} + \frac{1}{5} \right) \left(\frac{3}{2} - \frac{2}{13} \right) - \left[\left(\frac{9}{4} - \frac{3}{2} \right) + \frac{1}{5} \left(\frac{2}{3} + \frac{2}{9} \cdot \frac{3}{4} \right) \right] \right\} \cdot \left(\frac{7}{4} - \frac{1}{2} + 1 \right) = \\ & \left(\frac{1}{3} \right)^2 \cdot \left(-\frac{1}{3} \right)^3 \cdot (3^3) \cdot (-3)^5 : \left[\left(-\frac{1}{3} \right)^3 \right]^2 : (-3)^7 = \\ & \left\{ \left[\left(\frac{4}{5} \right)^4 : \left(\frac{8}{5} \right)^4 \right]^2 \cdot \left(-\frac{1}{2} \right)^3 \right\} : \left(-\frac{1}{2} \right)^6 : \frac{1}{16} = \\ & \left(\frac{5}{2} \right)^{-3} \cdot \left[\left(-\frac{2}{5} \right)^{-2} \right]^{-3} : \left(-\frac{2}{5} \right)^7 + \left[\left(-\frac{5}{2} \right)^6 : \left(\frac{2}{5} \right)^{-2} \right] \cdot \left(\frac{5}{2} \right)^{-4} = \\ & \frac{\left(\frac{1}{3} - 1 + \frac{5}{2} \right)^{-1}}{|-1| + |4| - |-3|} = \\ & - \left| \frac{-2}{5} + 2 \right| : \left[- \left| -\frac{1}{5} - 1 \right| \right] = \\ & \frac{1}{7} + \left(\frac{1}{4} + 1 \right) \left(\frac{1}{2} + \frac{2}{3} \right)^{-1} = \end{aligned}$$