

Numeri relativi. Frazioni di frazioni. Completi di soluzione guidata.

Signed Numbers

$$1. \quad \frac{+\frac{1}{4}}{-\frac{3}{2}} \qquad \left[-\frac{1}{6}\right]$$

[soluzione](#)

$$2. \quad \frac{-\frac{4}{7}}{-\frac{3}{14}} \qquad \left[+\frac{8}{3}\right]$$

[soluzione](#)

$$3. \quad \frac{-\frac{7}{9}}{+\frac{14}{3}} \qquad \left[-\frac{1}{6}\right]$$

[soluzione](#)

$$4. \quad \frac{1-\frac{7}{4}}{-\frac{3}{22}} \qquad \left[-\frac{11}{2}\right]$$

[soluzione](#)

$$5. \quad \frac{1-\frac{1}{4}}{-1-\frac{3}{2}} \qquad \left[-\frac{5}{4}\right]$$

[soluzione](#)

$$6. \quad \frac{-2+\frac{8}{5}}{\left(-\frac{9}{4}\right) \cdot \left(-\frac{3}{2}\right)} \qquad \left[-\frac{4}{15}\right]$$

[soluzione](#)

$$7. \quad \frac{-3+\frac{1}{2}}{\left(-\frac{25}{3}\right) \cdot \left(-\frac{6}{15}\right)} \qquad \left[-\frac{3}{4}\right]$$

[soluzione](#)

$$8. \quad -\frac{-3+\frac{1}{2}}{\left(-\frac{25}{9}\right) \cdot \left(-\frac{3}{5}\right)} \qquad \left[+\frac{3}{2}\right]$$

[soluzione](#)

$$9. \quad \frac{-1+\frac{1}{3}}{1-\frac{3}{2}} - 1 \qquad \left[\frac{1}{3}\right]$$

[soluzione](#)

$$10. \quad -1 - \frac{-\frac{1}{4}}{-\frac{1}{2}} \quad \left[-\frac{3}{2} \right] \\ \text{soluzione}$$

$$11. \quad \frac{1 - \frac{4}{3}}{\frac{3}{5} - 1} - 1 \quad \left[-\frac{1}{6} \right] \\ \text{soluzione}$$

$$12. \quad \frac{+\frac{9}{10}}{-\frac{3}{5}} - \frac{-\frac{3}{4}}{-\frac{9}{2}} \quad \left[-\frac{7}{6} \right] \\ \text{soluzione}$$

$$13. \quad \frac{+\frac{1}{5}}{-\frac{3}{2}} - \frac{+\frac{3}{4} \cdot \left(-\frac{2}{3}\right)}{-\frac{5}{2}} \quad \left[-\frac{1}{3} \right] \\ \text{soluzione}$$

$$14. \quad \frac{-\frac{2}{3}}{\frac{2}{3}} + \frac{-\frac{3}{8} \cdot \left(\frac{2}{3} - 2\right)}{-\frac{3}{2}} \quad \left[-\frac{4}{3} \right] \\ \text{soluzione}$$

$$15. \quad \frac{-1 + \frac{13}{18}}{1 + \frac{1}{9}} + \frac{\frac{7}{16}}{-\frac{21}{20}} \quad \left[-\frac{2}{3} \right] \\ \text{soluzione}$$

$$16. \quad \frac{\left(\frac{3}{4} + 1 - \frac{7}{5}\right) - \left(1 - \frac{3}{4} - \frac{1}{10}\right)}{\left(\frac{2}{3} + \frac{3}{4} - \frac{1}{6}\right) \cdot \left(-\frac{8}{10}\right)} \quad \left[-\frac{1}{5} \right] \\ \text{soluzione}$$

$$17. \quad -1 + \frac{\left(-\frac{1}{3} - 1\right) + \left(\frac{1}{5} - 1\right) : \left(\frac{2}{5} - 1\right)}{\left(\frac{1}{3} - 1\right) : \left(\frac{1}{5} - 1\right)} \quad [-1] \\ \text{soluzione}$$

$$18. \quad \frac{\left(\frac{3}{4} + 1 - \frac{7}{5}\right) \cdot \left(-\frac{7}{3} + \frac{34}{21}\right) : \left(-\frac{6}{5}\right)}{\left(\frac{5}{4} + \frac{5}{3}\right) \cdot \left(-\frac{1}{3} - \frac{3}{7}\right) \cdot \left(-\frac{1}{4}\right)} \quad \left[\frac{3}{8} \right] \\ \text{soluzione}$$

$$19. \quad \left(-\frac{3}{8}\right)^2 : \frac{7}{3} \cdot \left(-\frac{2}{3}\right)^3 - 1 \quad \left[-\frac{7}{6} \right] \\ \text{soluzione}$$

20. $\left(\frac{\frac{1}{3} + \frac{1}{4}}{\frac{2}{3} : \frac{4}{3}}\right)^2 - 2 \cdot \left(\frac{\frac{1}{4} - \frac{1}{3}}{\frac{2}{7} : \frac{4}{7}}\right)^2$ $\left[\frac{47}{36}\right]$
[soluzione](#)

21. $-\frac{1}{\frac{2}{3} - 1} + \frac{2 \cdot \left(\frac{1}{3} - 1\right)}{3}$ $\left[\frac{23}{9}\right]$
[soluzione](#)

22. $-\frac{\left(\frac{1}{3} - 1\right) : \left(-\frac{1}{3} - 1\right)}{\frac{1}{4} - 1} + \frac{\left(\frac{1}{5} - 2\right) : \left(\frac{2}{5} - 1\right)}{\left(\frac{1}{5} - 1\right)}$ $\left[-\frac{37}{12}\right]$
[soluzione](#)

23. $\frac{3 \cdot \left(\frac{1}{4} - 5\right)}{4} - \frac{4 \cdot \left(\frac{1}{8} - 2\right)}{5} + \frac{-\frac{10}{8} + 10}{10}$ $\left[-\frac{19}{16}\right]$
[soluzione](#)

24. $\frac{-1 + \frac{1}{5}}{\left(-\frac{1}{2} - 2\right) : \left(\frac{5}{4} - 1\right)} : \frac{\frac{3}{5} - 1}{\frac{1}{3} - 1}$ $\left[\frac{2}{15}\right]$
[soluzione](#)

25. $-\frac{\left[\left(\frac{4}{3} - \frac{1}{6}\right) : \left(\frac{11}{18} - 1\right) - \frac{4}{5} + 4\right] : \frac{2}{3}}{\left[\left(\frac{1}{7} - \frac{1}{5}\right) : \left(\frac{2}{3} - \frac{4}{7}\right) + \frac{4}{5}\right] : \frac{4}{15}}$ $\left[-\frac{2}{5}\right]$
[soluzione](#)

26. $\frac{0,2 - 0,\bar{3}}{0,2 - 0,\bar{2}} + 0,5$ $\left[-\frac{11}{2}\right]$
[soluzione](#)

27. $-\frac{-0,\bar{6}}{0,\bar{6}} + \frac{-0,375 \cdot (0,\bar{6} - 2)}{-1,5}$ $\left[\frac{2}{3}\right]$
[soluzione](#)

28. $-\frac{-1 + 0,2}{(-0,5 - 2) : (1,25 - 1)} : \frac{0,6 - 0,\bar{6}}{0,\bar{3} - 1}$ $\left[-\frac{1}{5}\right]$
[soluzione](#)

29. $\frac{-1 - 0,\bar{3}}{1 - 0,\bar{3}} : \frac{-1 + 0,\bar{3}}{3}$ $[9]$
[soluzione](#)

30. $1 + \frac{\left(\frac{1}{10} - \frac{3}{5}\right)^2}{\left(\frac{1}{3} - 1\right)^2} - \left(-\frac{1}{2} - \frac{2}{3}\right)^0 - \left(-\frac{5}{16}\right)^1$ $\left[\frac{7}{8}\right]$

Soluzioni

$$\begin{aligned} & \frac{+\frac{1}{4}}{-\frac{3}{2}} = \\ & = \left(+\frac{1}{4}\right) \cdot \left(-\frac{2}{3}\right) = -\frac{1}{6} \end{aligned}$$

$$\begin{aligned} & \frac{-\frac{4}{7}}{-\frac{3}{14}} = \\ & = \left(-\frac{4}{7}\right) \cdot \left(-\frac{14}{3}\right) = \frac{8}{3} \end{aligned}$$

$$\begin{aligned} & \frac{-\frac{7}{9}}{+\frac{14}{3}} = \\ & = \left(-\frac{7}{9}\right) \cdot \left(+\frac{3}{14}\right) = -\frac{1}{6} \end{aligned}$$

$$\begin{aligned} & \frac{1-\frac{7}{4}}{-\frac{3}{22}} = \\ & = \left(\frac{4-7}{4}\right) \cdot \left(-\frac{22}{3}\right) = \\ & = \left(-\frac{3}{4}\right) \cdot \left(-\frac{22}{3}\right) = +\frac{11}{2} \end{aligned}$$

$$\begin{aligned} & \frac{1 - \frac{1}{4}}{-1 - \frac{3}{2}} = \\ & = \frac{\frac{4-1}{4}}{\frac{-2-3}{2}} = \\ & = \left(+\frac{3}{4}\right) \cdot \left(-\frac{5}{3}\right) = -\frac{5}{4} \end{aligned}$$

$$\begin{aligned} & \frac{-2 + \frac{8}{5}}{\left(-\frac{9}{4}\right) : \left(-\frac{3}{2}\right)} = \\ & = \frac{\frac{-10+8}{5}}{+\frac{3}{2}} = \\ & = \left(-\frac{2}{5}\right) \cdot \left(+\frac{2}{3}\right) = -\frac{4}{15} \end{aligned}$$

$$\begin{aligned} & \frac{-3 + \frac{1}{2}}{\left(-\frac{25}{3}\right) \cdot \left(-\frac{6}{15}\right)} = \\ & = \frac{\frac{-6+1}{2}}{\left(-\frac{25}{3}\right) \cdot \left(-\frac{2}{5}\right)} = \\ & = \frac{\frac{-6+1}{2}}{+\frac{10}{3}} = \\ & = \left(-\frac{5}{2}\right) \cdot \left(+\frac{3}{10}\right) = -\frac{3}{4} \end{aligned}$$

$$\begin{aligned}
 & -\frac{-3 + \frac{1}{2}}{\left(-\frac{25}{9}\right) \cdot \left(-\frac{3}{5}\right)} = \\
 & = -\frac{\frac{-6 + 1}{2}}{\frac{5}{3}} = \\
 & = -\left(-\frac{5}{2}\right) \cdot \left(+\frac{3}{5}\right) = \\
 & = -\left(-\frac{3}{2}\right) = \frac{3}{2}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{-1 + \frac{1}{3}}{1 - \frac{3}{2}} - 1 = \\
 & = \left(\frac{-3 + 1}{3}\right) : \left(\frac{2 - 3}{2}\right) - 1 = \\
 & = \left(-\frac{2}{3}\right) \cdot \left(-\frac{2}{1}\right) - 1 = \\
 & = +\frac{4}{3} - 1 = \\
 & = \frac{4}{3} - \frac{3}{3} = \frac{1}{3}
 \end{aligned}$$

$$\begin{aligned}
 & -1 - \frac{-\frac{1}{4}}{-\frac{1}{2}} = \\
 & = -1 - \left(-\frac{1}{4}\right) \cdot \left(-\frac{2}{1}\right) = \\
 & = -1 - \left(+\frac{1}{2}\right) = \\
 & = -1 - \frac{1}{2} = \\
 & = -\frac{2}{2} - \frac{1}{2} = -\frac{3}{2}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{1 - \frac{4}{3}}{\frac{3}{5} - 1} - 1 = \\
 & = \frac{\frac{3-4}{3}}{\frac{3-5}{5}} - 1 = \\
 & = \left(-\frac{1}{3}\right) \cdot \left(-\frac{5}{2}\right) - 1 = \\
 & = \frac{5}{6} - 1 = \\
 & = \frac{5-6}{6} = -\frac{1}{6}
 \end{aligned}$$

$$\begin{aligned} & \frac{+\frac{9}{10}}{-\frac{3}{5}} - \frac{-\frac{3}{4}}{-\frac{9}{2}} = \\ & = \left(+\frac{9}{10}\right) \cdot \left(-\frac{5}{3}\right) - \left(-\frac{3}{4}\right) \cdot \left(-\frac{2}{9}\right) = \\ & = -\frac{3}{2} - \left(-\frac{1}{6}\right) = \\ & = -\frac{3}{2} + \frac{1}{6} = \\ & = \frac{-9+1}{6} = -\frac{7}{6} \end{aligned}$$

$$\begin{aligned} & \frac{+\frac{1}{5}}{-\frac{3}{2}} - \frac{+\frac{3}{4} \cdot \left(-\frac{2}{3}\right)}{-\frac{5}{2}} = \\ & = \frac{+\frac{1}{5}}{-\frac{3}{2}} - \frac{-\frac{1}{2}}{-\frac{5}{2}} = \\ & = \left(+\frac{1}{5}\right) \cdot \left(-\frac{2}{3}\right) - \left(-\frac{1}{2}\right) \cdot \left(-\frac{2}{5}\right) = \\ & = -\frac{2}{15} - \left(+\frac{1}{5}\right) = \\ & = -\frac{2}{15} - \frac{1}{5} = \\ & = \frac{-2-3}{15} = -\frac{5}{15} = -\frac{1}{3} \end{aligned}$$

$$\begin{aligned}
 & \frac{-\frac{2}{3}}{\frac{2}{3}} + \frac{-\frac{3}{8} \cdot \left(\frac{2}{3} - 2\right)}{-\frac{3}{2}} = \\
 & = -1 + \frac{-\frac{3}{8} \cdot \left(\frac{2-6}{3}\right)}{-\frac{3}{2}} = \\
 & = -1 + \frac{-\frac{3}{8} \cdot \left(-\frac{4}{3}\right)}{-\frac{3}{2}} = \\
 & = -1 + \frac{1}{2} \cdot \left(-\frac{2}{3}\right) = \\
 & = -1 - \frac{1}{3} = -\frac{4}{3}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{-1 + \frac{13}{18}}{1 + \frac{1}{9}} + \frac{\frac{7}{16}}{-\frac{20}{21}} = \\
 & = \frac{-18 + 13}{9 + 1} + \frac{7}{16} \cdot \left(-\frac{20}{21}\right) = \\
 & = -\frac{5}{18} \cdot \frac{9}{10} + \frac{1}{4} \cdot \left(-\frac{5}{3}\right) = \\
 & = -\frac{1}{2} \cdot \frac{1}{2} + \left(-\frac{5}{12}\right) = \\
 & = -\frac{1}{4} - \frac{5}{12} = \\
 & = \frac{-3-5}{12} = -\frac{8}{12} = -\frac{2}{3}
 \end{aligned}$$

$$\begin{aligned}
 & \left(\frac{3}{4} + 1 - \frac{7}{5}\right) - \left(1 - \frac{3}{4} - \frac{1}{10}\right) = \\
 & \left(\frac{2}{3} + \frac{3}{4} - \frac{1}{6}\right) \cdot \left(-\frac{8}{10}\right) = \\
 & \frac{15 + 20 - 28}{20} - \left(\frac{20 - 15 - 2}{20}\right) = \\
 & \frac{\left(\frac{8 + 9 - 2}{12}\right) \cdot \left(-\frac{4}{5}\right)}{\left(\frac{7}{20} - \left(+\frac{3}{20}\right)\right)} = \\
 & \frac{\left(+\frac{15}{12}\right) \cdot \left(-\frac{4}{5}\right)}{\left(+\frac{5}{4}\right) \cdot \left(-\frac{4}{5}\right)} = \\
 & \frac{7 - 3}{20 - 20} = \\
 & \frac{7 - 3}{20} = -\frac{4}{20} = -\frac{1}{5}
 \end{aligned}$$

$$\begin{aligned}
 & -1 + \frac{\left(-\frac{1}{3} - 1\right) + \left(\frac{1}{5} - 1\right) : \left(\frac{2}{5} - 1\right)}{\left(\frac{1}{3} - 1\right) : \left(\frac{1}{5} - 1\right)} = \\
 & -1 + \frac{\left(\frac{-1 - 3}{3}\right) + \left(\frac{1 - 5}{5}\right) : \left(\frac{2 - 5}{5}\right)}{\left(\frac{1 - 3}{3}\right) : \left(\frac{1 - 5}{5}\right)} = \\
 & -1 + \frac{-\frac{4}{3} + \left(-\frac{4}{5}\right) : \left(-\frac{3}{5}\right)}{\left(-\frac{2}{3}\right) : \left(-\frac{4}{5}\right)} = \\
 & -1 + \frac{-\frac{4}{3} + \frac{4}{3}}{\left(-\frac{2}{3}\right) \cdot \left(-\frac{5}{4}\right)} = \\
 & -1 + \frac{0}{\frac{5}{6}} = -1 + 0 = -1
 \end{aligned}$$

$$\begin{aligned}
 & \frac{\left(\frac{3}{4} + 1 - \frac{7}{5}\right) \cdot \left(-\frac{7}{3} + \frac{34}{21}\right) : \left(-\frac{6}{5}\right)}{\left(\frac{5}{4} + \frac{5}{3}\right) \cdot \left(-\frac{1}{3} - \frac{3}{7}\right) \cdot \left(-\frac{1}{4}\right)} = \\
 & = \frac{\left(\frac{15 + 20 - 28}{20}\right) \cdot \left(\frac{-49 + 34}{21}\right) \cdot \left(-\frac{5}{6}\right)}{\left(\frac{15 + 20}{12}\right) \cdot \left(\frac{-7 - 9}{21}\right) \cdot \left(-\frac{1}{4}\right)} = \\
 & = \frac{\left(\frac{7}{20}\right) \cdot \left(-\frac{15}{21}\right) \cdot \left(-\frac{5}{6}\right)}{\left(\frac{35}{12}\right) \cdot \left(-\frac{16}{21}\right) \cdot \left(-\frac{1}{4}\right)} = \\
 & = \frac{\left(\frac{1}{4}\right) \cdot \left(-\frac{3}{3}\right) \cdot \left(-\frac{5}{6}\right)}{\left(\frac{5}{3}\right) \cdot \left(-\frac{4}{3}\right) \cdot \left(-\frac{1}{4}\right)} = \\
 & = \frac{5}{24} = \frac{5}{24} \cdot \frac{9}{5} = \frac{3}{8}
 \end{aligned}$$

$$\begin{aligned}
& \left(-\frac{3}{8}\right)^2 : \frac{12}{\frac{7}{3}} \cdot \left(-\frac{2}{3}\right)^3 - 1 = \\
& = \frac{9}{64} \cdot \frac{3}{\frac{7}{12}} \cdot \left(-\frac{8}{27}\right) - 1 = \\
& = \frac{9}{64} \cdot \frac{7}{3} \cdot \frac{12}{7} \cdot \left(-\frac{8}{27}\right) - 1 = \\
& = 1 - \frac{1}{8} \cdot \frac{1}{1} \cdot \frac{4}{1} \cdot \left(-\frac{1}{3}\right) - 1 = \\
& = -\frac{1}{6} - 1 = -\frac{7}{6}
\end{aligned}$$

$$\begin{aligned}
& \left(\frac{\frac{1}{3} + \frac{1}{4}}{\frac{2}{3} : \frac{4}{3}}\right)^2 - 2 \cdot \left(\frac{\frac{1}{4} - \frac{1}{3}}{\frac{2}{7} : \frac{4}{7}}\right)^2 = \\
& = \left(\frac{\frac{4+3}{12}}{\frac{2}{3} \cdot \frac{3}{4}}\right)^2 - 2 \cdot \left(\frac{\frac{3-4}{12}}{\frac{2}{7} \cdot \frac{4}{7}}\right)^2 = \\
& = \left(\frac{7}{12} : \frac{1}{2}\right)^2 - 2 \cdot \left(-\frac{1}{12} : \frac{1}{2}\right)^2 = \\
& = \left(\frac{7}{6}\right)^2 - 2 \cdot \left(-\frac{1}{6}\right)^2 = \\
& = \frac{49}{36} - 2 \cdot \frac{1}{36} = \\
& = \frac{49}{36} - \frac{2}{36} = \frac{47}{36}
\end{aligned}$$

$$\begin{aligned}
& -\frac{1}{\frac{2}{3}-1} + \frac{2 \cdot \left(\frac{1}{3}-1\right)}{3} = \\
& = -\frac{1}{-\frac{1}{3}} + \frac{2 \cdot \left(-\frac{2}{3}\right)}{3} \\
& = +3 + \frac{-4}{3} \\
& = 3 + \left(-\frac{4}{3}\right) \cdot \frac{1}{3} = \\
& = 3 - \frac{4}{9} = \frac{23}{9}
\end{aligned}$$

$$\begin{aligned}
& -\frac{\left(\frac{1}{3}-1\right) : \left(-\frac{1}{3}-1\right)}{\frac{1}{4}-1} + \frac{\left(\frac{1}{5}-2\right) : \left(\frac{2}{5}-1\right)}{\left(\frac{1}{5}-1\right)} = \\
& = -\frac{\left(-\frac{2}{3}\right) : \left(-\frac{4}{3}\right)}{-\frac{3}{4}} + \frac{\left(-\frac{9}{5}\right) : \left(-\frac{3}{5}\right)}{\left(-\frac{4}{5}\right)} = \\
& = -\frac{\left(-\frac{2}{3}\right) \cdot \left(-\frac{3}{4}\right)}{-\frac{3}{4}} + \frac{\left(-\frac{9}{5}\right) \cdot \left(-\frac{5}{3}\right)}{\left(-\frac{4}{5}\right)} = \\
& = -\frac{\frac{1}{2}}{-\frac{3}{4}} + \frac{3}{-\frac{4}{5}} = \\
& = -\left(\frac{1}{2}\right) \cdot \left(-\frac{4}{3}\right) + 3 \cdot \left(-\frac{5}{4}\right) = \\
& = \frac{2}{3} - \frac{15}{4} = \\
& = \frac{8-45}{12} = -\frac{37}{12}
\end{aligned}$$

$$\begin{aligned}
 & \frac{3 \cdot \left(\frac{1}{4} - 5\right) - 4 \cdot \left(\frac{1}{8} - 2\right) - \frac{10}{8} + 10}{4 - 5 + 10} = \\
 & = \frac{3 \cdot \left(\frac{1-20}{4}\right) - 4 \cdot \left(\frac{1-16}{8}\right) - \frac{10+80}{8}}{4 - 5 + 10} = \\
 & = \frac{3 \cdot \left(-\frac{19}{4}\right) - 4 \cdot \left(-\frac{15}{8}\right) - \frac{70}{8}}{4 - 5 + 10} = \\
 & = -\frac{57}{4} \cdot \left(\frac{1}{4}\right) - \left(-\frac{15}{2}\right) \cdot \left(\frac{1}{5}\right) + \frac{70}{8} \cdot \left(\frac{1}{10}\right) = \\
 & = -\frac{57}{16} + \frac{3}{2} + \frac{7}{4} = \\
 & = \frac{-57 + 24 + 14}{16} = -\frac{19}{16}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{-1 + \frac{1}{5}}{\left(-\frac{1}{2} - 2\right) : \left(\frac{5}{4} - 1\right)} : \frac{\frac{3}{5} - 1}{\frac{1}{3} - 1} = \\
 & \frac{\frac{-5 + 1}{5}}{\left(\frac{-1 - 4}{2}\right) : \left(\frac{5 - 4}{4}\right)} : \frac{\frac{3 - 5}{5}}{\frac{1 - 3}{3}} = \\
 & = \frac{\frac{-5 + 1}{5}}{\left(-\frac{5}{2}\right) : \left(\frac{1}{4}\right)} : \left[\left(-\frac{2}{5}\right) \cdot \left(-\frac{3}{2}\right)\right] = \\
 & = \frac{-\frac{4}{5}}{\left(-\frac{5}{2}\right) \cdot \left(\frac{4}{1}\right)} : \frac{3}{5} = \\
 & = \frac{-\frac{4}{5} \cdot \frac{5}{1}}{-\frac{10}{1}} \cdot \frac{5}{3} = \\
 & = \left(-\frac{4^2}{5}\right) \cdot \left(-\frac{1}{10 \cdot 2}\right) \cdot \frac{5}{3} = \frac{2}{15}
 \end{aligned}$$

$$\begin{aligned}
 & - \frac{\left[\left(\frac{4}{3} - \frac{1}{6}\right) : \left(\frac{11}{18} - 1\right) - \frac{4}{5} + 4\right] : \frac{2}{3}}{\left[\left(\frac{1}{7} - \frac{1}{5}\right) : \left(\frac{2}{3} - \frac{4}{7}\right) + \frac{4}{5}\right] : \frac{4}{15}} = \\
 & = - \frac{\left[\left(\frac{8-1}{6}\right) : \left(\frac{11-18}{18}\right) - \frac{4}{5} + 4\right] \cdot \frac{3}{2}}{\left[\left(\frac{5-7}{35}\right) : \left(\frac{14-12}{21}\right) + \frac{4}{5}\right] \cdot \frac{15}{4}} = \\
 & = - \frac{\left[-3 - \frac{4}{5} + 4\right] \cdot \frac{3}{2}}{\left[\left(-\frac{2}{35}\right) : \left(+\frac{2}{21}\right) + \frac{4}{5}\right] \cdot \frac{15}{4}} = \\
 & = - \frac{\frac{-4+5}{5} \cdot \frac{3}{2}}{\left[\frac{-3+4}{5}\right] \cdot \frac{15}{4}} = \\
 & = - \frac{\frac{3}{10}}{\left[\frac{1}{5}\right] \cdot \frac{15}{4}} = \\
 & = - \left(\frac{3}{10} \cdot \frac{4}{3}\right) = -\frac{2}{5}
 \end{aligned}$$

$$\frac{0,2 - 0,\bar{3}}{0,2 - 0,\bar{2}} + 0,5 = \frac{0,2 - 0,(3)}{0,2 - 0,(2)} + 0,5 =$$

$$= \frac{\frac{2}{10} - \frac{3}{9}}{\frac{2}{10} - \frac{2}{9}} + \frac{5}{10} =$$

$$= \frac{\frac{1}{5} - \frac{3}{9}}{\frac{1}{5} - \frac{2}{9}} + \frac{1}{2} =$$

$$= \frac{\frac{9-3}{9-10}}{\frac{45}{9-10}} + \frac{1}{2} =$$

$$= \frac{\frac{6}{-1}}{\frac{45}{-1}} + \frac{1}{2} =$$

$$= \frac{6}{45} \cdot \left(-\frac{45}{1}\right) + \frac{1}{2} =$$

$$= -6 + \frac{1}{2} =$$


$$= \frac{-12+1}{2} = -\frac{11}{2}$$


$$\begin{aligned} & -\frac{-0,\bar{6}}{0,\bar{6}} + \frac{-0,375 \cdot (0,\bar{6} - 2)}{-1,5} = -\frac{-0,(6)}{0,(6)} + \frac{-0,375 \cdot (0,(6) - 2)}{-1,5} = \\ & = -\frac{-\frac{6}{9}}{\frac{6}{9}} + \frac{-\frac{375}{1000} \cdot (\frac{6}{9} - 2)}{-\frac{15}{10}} = \\ & = -\frac{-\frac{2}{3}}{\frac{2}{3}} + \frac{-\frac{3}{8} \cdot (\frac{2}{3} - 2)}{-\frac{3}{2}} = \\ & = -\left(-\frac{2}{3}\right) \cdot \left(\frac{3}{2}\right) + \frac{-\frac{3}{8} \cdot \left(\frac{2-6}{3}\right)}{-\frac{3}{2}} = \\ & = 1 + \frac{-\frac{3}{8} \cdot \left(-\frac{4}{3}\right)}{-\frac{3}{2}} = \\ & = 1 + \frac{1}{2} \cdot \left(-\frac{2}{3}\right) = 1 - \frac{1}{3} = \frac{2}{3} \end{aligned}$$


$$\begin{aligned}
 & -\frac{-1 + 0,2}{(-0,5 - 2) : (1,25 - 1)} : \frac{0,6 - 0,\bar{6}}{0,\bar{3} - 1} = -\frac{-1 + 0,2}{(-0,5 - 2) : (1,25 - 1)} : \frac{0,6 - 0,(6)}{0,(3) - 1} = \\
 & = -\frac{-1 + \frac{2^1}{10_5}}{\left(-\frac{2^1}{10_5} - 2\right) : \left(\frac{125^5}{100_4} - 1\right)} : \frac{\frac{6^2}{10_5} - \frac{6^2}{9_3}}{\frac{6^2}{9_3} - 1} = \\
 & = -\frac{\frac{-5 + 1}{5}}{\left(\frac{-1 - 4}{2}\right) : \left(\frac{5 - 4}{4}\right)} : \frac{\frac{9 - 10}{15}}{\frac{1 - 3}{3}} = \\
 & = -\frac{\frac{-5 + 1}{5}}{\left(-\frac{5}{2}\right) : \left(\frac{1}{4}\right)} : \left[\left(-\frac{4}{15}\right) \cdot \left(-\frac{3}{2}\right)\right] = \\
 & = -\frac{-\frac{4}{5}}{\left(-\frac{5}{2}\right) \cdot \left(\frac{4}{1}\right)} : \frac{2}{5} = \\
 & = -\frac{-\frac{4}{5} \cdot 5}{-\frac{10}{1}} \cdot \frac{5}{2} = \\
 & = -\left(-\frac{4}{5}\right) \cdot \left(-\frac{1}{10}\right) \cdot \frac{5}{2} = -\frac{1}{5}
 \end{aligned}$$

$$\begin{aligned} & \frac{-1 - 0, \bar{3}}{1 - 0, \bar{3}} : \frac{-1 + 0, \bar{3}}{3} = \\ & = \frac{-1 - \frac{1}{3}}{1 - \frac{1}{3}} : \frac{-1 + \frac{1}{3}}{3} = \\ & = \frac{\frac{-3 - 1}{3}}{\frac{3 - 1}{3}} : \frac{\frac{-3 + 1}{3}}{3} = \\ & = \left(-\frac{4}{3}\right) : \left(+\frac{2}{3}\right) : \left[\left(-\frac{2}{3}\right) : 3\right] \\ & = \left(-\frac{4}{3}\right) \cdot \frac{3}{2} : \left[\left(-\frac{2}{3}\right) \cdot \frac{1}{3}\right] \\ & = -2 : \left[-\frac{2}{9}\right] = \\ & = -2 \cdot \left(-\frac{9}{2}\right) = +9 \end{aligned}$$


Keywords

 Algebra, numeri relativi, relativi, numeri positivi, numeri negativi, valore assoluto, numeri reali, segno, Z, espressioni algebriche, esercizi con soluzioni, matematica

 Algebra, Z, signed numbers, integers, negative e non-negative numbers, real numbers, sign, exercises with solution, Algebraic Expressions solved, math

 Algebra, Z, nombre negativo, nombre positivo, signo, matemática

 Algèbre, Z, nombres relatifs, nombre négatifs, nombre positifs, nombres réels, mathématique

 Algebra, Z, Positive und Negative Zahlen, reellen Zahlen, Signum, Mathematik
