

Espressioni con le quattro operazioni. Livello intermedio.

Completi di soluzione guidata.

Evaluating Expressions Involving Fractions – With solutions

1. $\left[\frac{16}{15} \cdot \frac{45}{8} - \left(\frac{3}{8} + \frac{1}{2} - \frac{3}{4} \right) \cdot \frac{4}{3} \right] \cdot \frac{2}{7} - \left(1 - \frac{1}{2} \right)$ 7/6
[soluzione](#)
2. $\left[\left(\frac{3}{2} - \frac{1}{3} \right) : \left(2 - \frac{1}{4} \right) - \left(\frac{1}{3} - \frac{1}{4} \right) \right] : \left(\frac{2}{7} - \frac{1}{7} \right)$ 49/12
[soluzione](#)
3. $\frac{1}{2} + \frac{1}{2} : \left[\frac{2}{5} + \frac{1}{7} \cdot \left(\frac{2}{6} + \frac{1}{4} \right) : \frac{1}{4} \right] + \frac{7}{5} : \left(\frac{1}{5} + \frac{1}{2} \right)$ 35/11
[soluzione](#)
4. $\frac{38}{6} \cdot \left(1 - \frac{1}{19} \right) - \left[\left(\frac{5}{4} + \frac{10}{3} \right) \cdot \frac{3}{20} - \frac{21}{20} \cdot \frac{5}{28} \right] : \frac{1}{3}$ 9/2
[soluzione](#)
5. $\left\{ 4 - \left(\frac{3}{4} + \frac{1}{2} + \frac{5}{4} \right) - \left[\left(\frac{5}{3} + \frac{2}{5} - 2 \right) + \frac{3}{5} \right] \right\} : \frac{1}{3}$ 5/2
[soluzione](#)
6. $\left(\frac{16}{5} - \frac{13}{15} - \frac{5}{4} \right) : \frac{3}{16} - \frac{20}{3} \cdot \left(\frac{1}{3} + \frac{19}{20} - \frac{7}{10} \right)$ 17/9
[soluzione](#)
7. $\left[\left(5 - \frac{3}{7} \right) \cdot 5 - \left(\frac{32}{7} - 4 \right) : \frac{1}{5} \right] : \frac{5}{4} + \left(1 - \frac{1}{3} \right) + \frac{10}{3}$ 20
[soluzione](#)
8. $\left\{ \left[\frac{5}{7} + \frac{11}{6} : \left(\frac{1}{4} + \frac{2}{3} \right) \right] \cdot \frac{21}{19} - \left(\frac{1}{6} + \frac{7}{12} \right) \cdot \frac{4}{5} \right\} : 3 - \frac{1}{2}$ 3/10
[soluzione](#)
9. $\left[\left(\frac{15}{25} - \frac{2}{6} \right) \cdot \frac{9}{12} + \left(\frac{4}{15} - \frac{11}{45} \right) \cdot \frac{10}{2} \right] : \frac{7}{9}$ 2/5
[soluzione](#)
10. $\left[\left(\frac{9}{12} + \frac{10}{4} \right) : \frac{26}{4} + \left(\frac{10}{8} - \frac{21}{18} \right) : \frac{10}{12} \right] \cdot \left[\left(\frac{9}{15} + \frac{4}{2} - \frac{5}{3} \right) : \frac{35}{45} \right]$ 18/25
[soluzione](#)
11. $\left(1 - \frac{5}{7} \right) \cdot \left[\left(3 - \frac{6}{7} - \frac{5}{14} \right) : \left(\frac{5}{6} - \frac{1}{3} - \frac{3}{7} \right) - \frac{5}{12} \right]$ 35/6
[soluzione](#)
12. $\left[\left(\frac{3}{4} - \frac{5}{7} \right) : \left(\frac{10}{12} + \frac{4}{9} - 1 \right) \right] : \left\{ \left(\frac{1}{2} - \frac{3}{7} \right) : \left[\left(\frac{3}{4} - \frac{2}{3} \right) : \frac{1}{5} \right] \right\} - \frac{1}{2}$ 1/4
[soluzione](#)
13. $\left[\left(1 - \frac{1}{2} \right) \cdot \frac{1}{8} \right] : \left\{ \left[\left(\frac{3}{7} + \frac{1}{6} - \frac{5}{14} \right) \cdot \left(5 + \frac{1}{4} \right) - \frac{1}{2} \right] - \frac{1}{4} \right\} + \frac{1}{2}$ 5/8
[soluzione](#)

14. $\left(3 + \frac{6}{8} - \frac{14}{7}\right) \cdot \frac{2}{7} \cdot \left(\frac{1}{4} - \frac{1}{6}\right) - \frac{1}{24}$ 0
[soluzione](#)
15. $\frac{21}{26} : \frac{7}{13} + 3 \cdot \frac{5}{6} + \left(1 - \frac{3}{4}\right) - \left(1 - \frac{9}{28}\right)$ 25/7
[soluzione](#)
16. $\left[\left(\frac{3}{4} + \frac{2}{3}\right) \cdot \frac{3}{34} + \left(\frac{1}{3} - \frac{1}{4}\right) \cdot \frac{3}{2} - \left(1 - \frac{3}{4}\right) \cdot \frac{1}{3}\right] : \frac{3}{2} + \frac{5}{7} : \left(1 + \frac{2}{7}\right) - \frac{1}{3}$ 1/3
[soluzione](#)
17. $\left[\frac{2}{3} - \left(\frac{1}{8} + \frac{1}{4}\right) \cdot \frac{2}{3}\right] : \left(3 + \frac{1}{3}\right) + \left(1 + \frac{1}{3}\right) : 8$ 7/24
[soluzione](#)
18. $1 + \left(1 - \frac{3}{5}\right) \cdot \left(3 + \frac{1}{3}\right) - \frac{4}{3} : \left(1 + \frac{1}{3}\right) + \frac{14}{5} \cdot \frac{1}{7} + 3 : \left(2 + \frac{4}{3}\right)$ 79/30
[soluzione](#)
19. $\left\{\frac{1}{7} \cdot \left[\left(\frac{3}{4} + \frac{5}{6}\right) \cdot \left(1 + \frac{5}{19}\right) - \frac{2}{3} \cdot \frac{2}{3}\right] + \frac{4}{5} : 2\right\} \cdot \frac{15}{28}$ 1/3
[soluzione](#)
20. $\left\{\left[\frac{4}{7} + \frac{16}{15} \cdot \left(\frac{5}{56} - \frac{5}{28} : \frac{5}{2} + \frac{1}{4}\right)\right] : \frac{4}{7} - \frac{5}{12}\right\} : \frac{13}{16} + \frac{9}{4} : \frac{3}{4}$ 13/3
[soluzione](#)
21. $\left\{\frac{5}{6} - \left[\frac{2}{3} + \left(\frac{3}{4} - \frac{4}{9}\right) - \left(1 - \frac{7}{3} \cdot \frac{1}{4}\right)\right] + \frac{2}{3} : \frac{8}{9}\right\} \cdot \frac{36}{37}$ 1
[soluzione](#)
22. $\left[\left(\frac{23}{4} - \frac{31}{8}\right) : \left(\frac{29}{6} - \frac{11}{3}\right) - \left(\frac{4}{7} + \frac{5}{4}\right) \cdot \frac{7}{17}\right] \cdot \frac{49}{36} - \left(\frac{3}{12} - \frac{1}{6}\right)$ 13/12
[soluzione](#)
23. $\left[\left(\frac{3}{2} - \frac{37}{60} + \frac{4}{15}\right) : \left(\frac{21}{10} - \frac{37}{20}\right) - \frac{25}{2} \cdot \left(\frac{9}{10} - \frac{3}{25} - \frac{3}{4}\right)\right] \cdot \frac{10}{13} - \frac{9}{4}$ 1
[soluzione](#)
24. $\left\{\frac{8}{5} + \left[\frac{8}{7} - \left(\frac{2}{3} + \frac{4}{5}\right) \cdot \frac{15}{22}\right] \cdot \frac{7}{3}\right\} : \frac{29}{15}$ 1
[soluzione](#)
25. $\frac{2}{3} + \frac{4}{33} \cdot \left\{\left[\frac{5}{73} \cdot \left(\frac{28}{5} - \frac{1}{8}\right) - \left(\frac{2}{15} + \frac{4}{9} - \frac{1}{3}\right) \cdot \frac{9}{22}\right] \cdot \left(\frac{7}{5} - \frac{1}{8} : \frac{1}{4} + \frac{8}{3} - \frac{7}{30}\right)\right\}$ 7/9
[soluzione](#)
26. $\left\{\left[\frac{7}{5} \cdot \left(\frac{3}{5} : \frac{7}{5} + 1\right) \cdot \frac{10}{2}\right] : \frac{5}{2} + \frac{1}{4}\right\} : \frac{17}{5}$ 5/4
[soluzione](#)
27. $2 + \left[\left(\frac{8}{5} - \frac{3}{2}\right) + \left(\frac{4}{3} - 1\right)\right] : \frac{26}{5}$ 25/12
[soluzione](#)
28. $\frac{22}{15} \cdot \left[\frac{5}{6} + \left(10 + \frac{1}{2}\right) : \frac{7}{10} - \frac{1}{3} \cdot \frac{5}{2}\right] + \frac{3}{7} \cdot \frac{14}{12}$ 45/2
[soluzione](#)

29. $\left[\left(\frac{14}{3} + \frac{17}{9}\right) : \frac{59}{9} + \left(\frac{31}{9} + \frac{2}{3}\right)\right] : \left(1 + \frac{37}{9}\right)$ 1
[soluzione](#)
30. $\left[\left(2 - \frac{4}{10}\right) \cdot \frac{3}{4} - \left(\frac{13}{20} - \frac{6}{10}\right) : \frac{3}{4}\right] : \left(\frac{5}{4} - \frac{11}{12}\right)$ 17/5
[soluzione](#)
31. $\left(\frac{3}{5} + \frac{2}{3}\right) + \left(\frac{25}{8} \cdot \frac{1}{9} + \frac{5}{12}\right) : \left(\frac{5}{4} \cdot \frac{5}{2} \cdot \frac{1}{3}\right)$ 2
[soluzione](#)
32. $\left(1 - \frac{4}{5}\right) - \frac{1}{3} \cdot \left[\frac{3}{2} - \left(\frac{4}{5} : \frac{8}{3} + \frac{3}{4}\right)\right] : \left(5 - \frac{1}{2}\right) + \frac{9}{10} : \left(4 - \frac{2}{5}\right)$ 5/12
[soluzione](#)
33. $\left(2 - \frac{1}{2}\right) - \left\{\left[\frac{6}{2} \cdot \left(\frac{11}{6} - \frac{7}{4}\right)\right] : \left[1 - \left(\frac{5}{2} - \frac{3}{4}\right) : \frac{21}{5}\right]\right\} : \frac{5}{7}$ 9/10
[soluzione](#)
34. $\left(\frac{1}{4} \cdot \frac{5}{2} - \frac{3}{2} \cdot \frac{1}{4}\right) \cdot \left(\frac{6}{3} \cdot \frac{5}{4} + 1\right) : \left(\frac{6}{10} \cdot \frac{5}{2} + 1\right)$ 7/20
[soluzione](#)
35. $\left[\left(\frac{3}{2} - \frac{1}{3}\right) : \left(2 - \frac{1}{4}\right) - \left(\frac{1}{3} - \frac{1}{4}\right)\right] : \left(\frac{2}{7} - \frac{1}{7}\right)$ 49/12
[soluzione](#)
36. $\left\{\left[\left(\frac{6}{5} - \frac{1}{10}\right) : \left(2 + \frac{1}{5}\right)\right] : \left[\left(\frac{2}{3} : \frac{5}{6} + \frac{1}{10}\right) : \frac{3}{25}\right]\right\} : \frac{7}{30}$ 2/7
[soluzione](#)
37. $\left(1 - \frac{1}{5}\right) - \left(1 - \frac{2}{3}\right) \cdot \left[\left(1 + \frac{1}{2}\right) - \left(\frac{4}{5} : \frac{8}{3} + \frac{3}{4}\right)\right] \cdot \frac{9}{2} + \left(1 - \frac{1}{10}\right) : \left(4 - \frac{2}{5}\right)$ 3/8
[soluzione](#)
38. $\left\{\left(1 - \frac{1}{4}\right) \cdot \left[\frac{7}{3} : \frac{7}{6} + \frac{9}{3} - \frac{3}{2} : \left(1 - \frac{1}{2}\right)\right] - \frac{1}{6}\right\} : \frac{20}{9}$ 3/5
[soluzione](#)
39. $\left[\left(1 - \frac{2}{3}\right) : \frac{5}{6}\right] \cdot \left[\left(1 - \frac{11}{13}\right) \cdot \left(\frac{3}{4} + \frac{5}{2}\right)\right] : \left[\left(1 + \frac{1}{5}\right) \cdot \left(\frac{5}{4} - \frac{7}{6}\right)\right]$ 2
[soluzione](#)
40. $\left[\left(1 - \frac{1}{2}\right) + \left(\frac{5}{3} - \frac{2}{5}\right) : \frac{19}{3}\right] \cdot \left\{1 : \left[\left(1 + \frac{7}{4}\right)^2 : \left(2 + \frac{3}{4}\right)\right] : \frac{4}{11}\right\}$ 7/10
[soluzione](#)
41. $\left(1 + \frac{5}{4}\right) \cdot \left[1 + \left(1 - \frac{1}{2}\right) \cdot \left(1 - \frac{1}{2}\right)\right] : \left[\frac{1}{2} + 1 : \left(1 + \frac{1}{3}\right)\right]$ 9/4
[soluzione](#)
42. $\left[\left(\frac{17}{45} - \frac{1}{10}\right) \cdot \frac{2}{5} + \frac{11}{12} : \frac{11}{2}\right] : \left(1 + \frac{2}{3} - \frac{11}{9}\right)$ 5/8
[soluzione](#)
43. $\left[\left(\frac{3}{8} + \frac{2}{3}\right) : \left(\frac{1}{4} + \frac{5}{6} - 1\right) - \left(3 - \frac{1}{2}\right)\right] : \left(1 - \frac{3}{5}\right) \cdot \frac{1}{3}$ 25/3
[soluzione](#)

44. $\left[\frac{1}{3} \cdot \left(\frac{1}{3} + \frac{1}{2}\right) : 5 + \frac{1}{9}\right] \cdot \frac{1}{3} + \frac{5}{6} - \left(1 - \frac{2}{3}\right) \cdot \frac{1}{3}$ 7/9
[soluzione](#)
45. $\left[\frac{13}{5} : \left(2 + \frac{5}{4}\right) - \left(1 - \frac{1}{2}\right)\right] : \frac{4}{5} + \left(1 - \frac{1}{6}\right) - \left(1 - \frac{2}{3}\right)$ [7]
[soluzione](#)
46. $\left\{\left[\left(\frac{4}{5} - \frac{1}{6}\right) : \left(\frac{19}{6} \cdot \frac{12}{3}\right)\right] : \frac{3}{10} + 1\right\} : \frac{7}{6} - \frac{1}{3}$ [2]
[soluzione](#)
47. $\left[\left(1 - \frac{2}{3}\right) \cdot \frac{5}{6} \cdot \left(1 - \frac{2}{3}\right) + \frac{1}{3} : 3\right] \cdot \frac{1}{3} + \frac{5}{6} - \left(1 - \frac{8}{9}\right)$ [7]
[soluzione](#)
48. $\left[\left(1 - \frac{3}{4}\right) : \frac{1}{8}\right] \cdot \left[\left(1 + \frac{1}{2}\right) - \frac{3}{4} : \left(1 - \frac{1}{4}\right)\right]$ [1]
[soluzione](#)
49. $\left\{\left[\left(1 + \frac{1}{2} : 2 - \frac{1}{2}\right) + \left(\frac{1}{3} : \frac{1}{3} + \frac{1}{2} \cdot \frac{1}{3}\right)\right] - \left(1 : \frac{3}{5} - \frac{1}{2} + 1\right)\right\} : \frac{3}{4}$ [1]
[soluzione](#)
50. $\left[\frac{1}{2} - \left(1 - \frac{1}{3}\right) : \frac{5}{6}\right] \cdot \left[\left(1 + \frac{3}{4}\right) - \left(1 - \frac{3}{4}\right) : \left(1 + \frac{3}{4}\right) - 1\right] : \frac{17}{14}$ [3]
[soluzione](#)
51. $\left[\left(1 + \frac{1}{2}\right) + \left(1 - \frac{1}{3}\right) : \left(1 - \frac{2}{3}\right)\right] \cdot \left[\left(1 + \frac{1}{5}\right) : \left(1 - \frac{2}{6}\right) - \left(1 - \frac{1}{4}\right) : \left(1 + \frac{1}{4}\right)\right] : \left(1 + \frac{1}{6}\right)$ [18]
[soluzione](#)
52. $\left[\left(\frac{5}{9} - \frac{1}{6}\right) \cdot \frac{45}{4} - \frac{7}{4} \cdot \frac{7}{4}\right] \cdot \left[\frac{11}{21} + \frac{20}{9} \cdot \left(\frac{6}{7} - \frac{9}{28}\right)\right]$ [8]
[soluzione](#)

Soluzioni

$$\begin{aligned}
 & \left[\frac{16}{15} \cdot \frac{45}{8} - \left(\frac{3}{8} + \frac{1}{2} - \frac{3}{4} \right) \cdot \frac{4}{3} \right] \cdot \frac{2}{7} - \left(1 - \frac{1}{2} \right) = \\
 & = \left[6 - \frac{3+4-6}{8} \cdot \frac{4}{3} \right] \cdot \frac{2}{7} - \frac{2-1}{2} = \\
 & = \left[6 - \frac{1}{8} \cdot \frac{4}{3} \right] \cdot \frac{2}{7} - \frac{1}{2} = \\
 & = \left[6 - \frac{1}{6} \right] \cdot \frac{2}{7} - \frac{1}{2} = \\
 & = \frac{36-1}{6} \cdot \frac{2}{7} - \frac{1}{2} = \\
 & = \frac{35}{6} \cdot \frac{2}{7} - \frac{1}{2} = \\
 & = \frac{5}{3} - \frac{1}{2} = \\
 & = \frac{10-3}{6} = \frac{7}{6}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{3}{2} - \frac{1}{3} \right) : \left(2 - \frac{1}{4} \right) - \left(\frac{1}{3} - \frac{1}{4} \right) \right] : \left(\frac{2}{7} - \frac{1}{7} \right) = \\
 & = \left[\left(\frac{9-2}{6} \right) \cdot \left(\frac{8-1}{4} \right) - \frac{4-3}{12} \right] : \frac{1}{7} = \\
 & = \left[\frac{7}{6} \cdot \frac{7}{4} - \frac{1}{12} \right] \cdot \frac{7}{1} = \\
 & = \left[\frac{2}{3} - \frac{1}{12} \right] \cdot \frac{7}{1} = \\
 & = \left[\frac{8-1}{12} \right] \cdot \frac{7}{1} = \\
 & = \frac{7}{12} \cdot \frac{7}{1} = \frac{49}{12}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{1}{2} + \frac{1}{2} : \left[\frac{2}{5} + \frac{1}{7} \cdot \left(\frac{2}{6} + \frac{1}{4} \right) : \frac{1}{4} \right] + \frac{7}{5} : \left(\frac{1}{5} + \frac{1}{2} \right) = \\
 & = \frac{1}{2} + \frac{1}{2} : \left[\frac{2}{5} + \frac{1}{7} \cdot \left(\frac{4+3}{12} \right) : \frac{1}{4} \right] + \frac{7}{5} : \left(\frac{2+5}{10} \right) = \\
 & = \frac{1}{2} + \frac{1}{2} : \left[\frac{2}{5} + \frac{1}{7} \cdot \frac{7}{12} : \frac{1}{4} \right] + \frac{7}{5} : \frac{7}{10} = \\
 & = \frac{1}{2} + \frac{1}{2} : \left[\frac{2}{5} + \frac{1}{12} : \frac{1}{4} \right] + \frac{2}{1} = \\
 & = \frac{1}{2} + \frac{1}{2} : \left[\frac{6+5}{15} \right] + \frac{2}{1} = \\
 & = \frac{1}{2} + \frac{1}{2} \cdot \frac{15}{11} + \frac{2}{1} = \\
 & = \frac{1}{2} + \frac{1}{2} \cdot \frac{11}{15} + \frac{2}{1} = \\
 & = \frac{1}{2} + \frac{15}{22} + \frac{2}{1} = \\
 & = \frac{11+15+44}{22} = \frac{70}{22} = \frac{35}{11}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{38}{6} \cdot \left(1 - \frac{1}{19}\right) - \left[\left(\frac{5}{4} + \frac{10}{3}\right) \cdot \frac{3}{20} - \frac{21}{20} \cdot \frac{5}{28} \right] : \frac{1}{3} = \\
 & = \frac{38}{6} \cdot \left(\frac{19-1}{19}\right) - \left[\left(\frac{15+40}{12}\right) \cdot \frac{3}{20} - \frac{3}{4} \cdot \frac{1}{4} \right] \cdot \frac{3}{1} = \\
 & = \frac{38}{6} \cdot \frac{18}{19} - \left[\frac{55}{12} \cdot \frac{3}{20} - \frac{3}{16} \right] \cdot \frac{3}{1} = \\
 & = \frac{2}{1} \cdot \frac{3}{1} - \left[\frac{11}{4} \cdot \frac{1}{4} - \frac{3}{16} \right] \cdot \frac{3}{1} = \\
 & = 6 - \left[\frac{11}{16} - \frac{3}{16} \right] \cdot \frac{3}{1} = \\
 & = 6 - \frac{8}{16} \cdot \frac{3}{1} = \\
 & = 6 - \frac{1}{2} \cdot \frac{3}{1} = \\
 & = 6 - \frac{3}{2} = \\
 & = \frac{12-3}{2} = \frac{9}{2}
 \end{aligned}$$

$$\begin{aligned}
 & \left\{ 4 - \left(\frac{3}{4} + \frac{1}{2} + \frac{5}{4}\right) - \left[\left(\frac{5}{3} + \frac{2}{5} - 2\right) + \frac{3}{5} \right] \right\} : \frac{1}{3} = \\
 & = \left\{ 4 - \left(\frac{3+2+5}{4}\right) - \left[\left(\frac{25+6-30}{15}\right) + \frac{3}{5} \right] \right\} \cdot \frac{3}{1} = \\
 & = \left\{ 4 - \frac{10}{4} - \left[\frac{1}{15} + \frac{3}{5} \right] \right\} \cdot \frac{3}{1} = \\
 & = \left\{ 4 - \frac{5}{2} - \left[\frac{1+9}{15} \right] \right\} \cdot \frac{3}{1} = \\
 & = \left\{ 4 - \frac{5}{2} - \frac{10}{15} \right\} \cdot \frac{3}{1} = \\
 & = \left\{ \frac{24-15-4}{6} \right\} \cdot \frac{3}{1} = \\
 & = \frac{5}{6} \cdot \frac{3}{1} = \frac{5}{2}
 \end{aligned}$$

$$\begin{aligned}
 & \left(\frac{16}{5} - \frac{13}{15} - \frac{5}{4} \right) : \frac{3}{16} - \frac{20}{3} \cdot \left(\frac{1}{3} + \frac{19}{20} - \frac{7}{10} \right) = \\
 & = \left(\frac{192 - 52 - 75}{60} \right) \cdot \frac{16}{3} - \frac{20}{3} \cdot \left(\frac{20 + 57 - 42}{60} \right) = \\
 & = \frac{65^{13}}{60_{12_3}} \cdot \frac{16^4}{3} - \frac{120}{3} \cdot \frac{35}{60_3} = \\
 & = \frac{52}{9} - \frac{35}{9} = \\
 & = \frac{52 - 35}{9} = \frac{17}{9}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(5 - \frac{3}{7} \right) \cdot 5 - \left(\frac{32}{7} - 4 \right) : \frac{1}{5} \right] : \frac{5}{4} + \left(1 - \frac{1}{3} \right) + \frac{10}{3} = \\
 & \left[\left(\frac{32}{7} \right) \cdot 5 - \left(\frac{4}{7} \right) \cdot \frac{5}{1} \right] \cdot \frac{4}{5} + \frac{2}{3} + \frac{10}{3} = \\
 & \left[\frac{160}{7} - \frac{20}{7} \right] \cdot \frac{4}{5} + \frac{2}{3} + \frac{10}{3} = \\
 & = \frac{140}{7_1} \cdot \frac{4}{5} + \frac{2}{3} + \frac{10}{3} = \\
 & = \frac{4 \cdot 20}{1} \cdot \frac{4}{5_1} + \frac{2}{3} + \frac{10}{3} = \\
 & = \frac{16}{1} + \frac{2}{3} + \frac{10}{3} = \\
 & = \frac{48 + 2 + 10}{3} = \\
 & = \frac{60}{3} = 20
 \end{aligned}$$

$$\begin{aligned}
 & \left\{ \left[\frac{5}{7} + \frac{11}{6} : \left(\frac{1}{4} + \frac{2}{3} \right) \right] \cdot \frac{21}{19} - \left(\frac{1}{6} + \frac{7}{12} \right) \cdot \frac{4}{5} \right\} : 3 - \frac{1}{2} = \\
 & = \left\{ \left[\frac{5}{7} + \frac{11}{6} : \left(\frac{3+8}{12} \right) \right] \cdot \frac{21}{19} - \left(\frac{2+7}{12} \right) \cdot \frac{4}{5} \right\} : 3 - \frac{1}{2} = \\
 & = \left\{ \left[\frac{5}{7} + \frac{2}{1} \right] \cdot \frac{21}{19} - \left(\frac{9^3}{3_1} \right) \cdot \frac{1}{5} \right\} \cdot \frac{1}{3} - \frac{1}{2} = \\
 & = \left\{ \left[\frac{19}{7} \right] \cdot \frac{21^3}{19_1} - \left(\frac{3}{1} \right) \cdot \frac{1}{5} \right\} \cdot \frac{1}{3} - \frac{1}{2} = \\
 & = \left\{ \frac{3}{1} - \frac{3}{5} \right\} \cdot \frac{1}{3} - \frac{1}{2} = \\
 & = \left\{ \frac{15-3}{5} \right\} \cdot \frac{1}{3} - \frac{1}{2} = \\
 & = \left\{ \frac{12}{5} \right\} \cdot \frac{1}{3} - \frac{1}{2} = \\
 & = \frac{4}{5} - \frac{1}{2} = \\
 & = \frac{8-5}{10} = \frac{3}{10}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{15}{25} - \frac{2}{6} \right) \cdot \frac{9}{12} + \left(\frac{4}{15} - \frac{11}{45} \right) \cdot \frac{10}{2} \right] : \frac{7}{9} = \\
 & \left[\left(\frac{{}^3\mathbf{15}}{{}_5\mathbf{25}} - \frac{\mathbf{2}^1}{\mathbf{6}_3} \right) \cdot \frac{\mathbf{9}^3}{\mathbf{12}_4} + \left(\frac{\mathbf{4}}{\mathbf{15}} - \frac{\mathbf{11}}{\mathbf{45}} \right) \cdot \frac{\mathbf{10}}{\mathbf{2}} \right] : \frac{\mathbf{7}}{\mathbf{9}} = \\
 & = \left[\left(\frac{\mathbf{9-5}}{\mathbf{15}} \right) \cdot \frac{\mathbf{3}}{\mathbf{4}} + \left(\frac{\mathbf{12-11}}{\mathbf{45}} \right) \cdot \frac{\mathbf{5}}{\mathbf{1}} \right] \cdot \frac{\mathbf{9}}{\mathbf{7}} = \\
 & = \left[\left(\frac{{}^1\mathbf{4}}{{}_5\mathbf{15}} \right) \cdot \frac{\mathbf{3}^1}{\mathbf{4}_1} + \left(\frac{\mathbf{1}}{9\mathbf{45}} \right) \cdot \frac{\mathbf{5}}{\mathbf{1}} \right] \cdot \frac{\mathbf{9}}{\mathbf{7}} = \\
 & = \left[\frac{\mathbf{1}}{\mathbf{5}} + \frac{\mathbf{1}}{\mathbf{9}} \right] \cdot \frac{\mathbf{9}}{\mathbf{7}} = \\
 & = \left[\frac{{}^2\mathbf{14}}{5\mathbf{45}} \right] \cdot \frac{\mathbf{9}}{\mathbf{7}_1} = \frac{\mathbf{2}}{\mathbf{5}}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{9}{12} + \frac{10}{4} \right) : \frac{26}{4} + \left(\frac{10}{8} - \frac{21}{18} \right) : \frac{10}{12} \right] \cdot \left[\left(\frac{9}{15} + \frac{4}{2} - \frac{5}{3} \right) : \frac{35}{45} \right] = \\
 & = \left[\left(\frac{\mathbf{9+30}}{\mathbf{12}} \right) \cdot \frac{\mathbf{4}}{\mathbf{26}} + \left(\frac{\mathbf{90-84}}{\mathbf{72}} \right) \cdot \frac{\mathbf{12}}{\mathbf{10}} \right] \cdot \left[\left(\frac{\mathbf{18+60-50}}{\mathbf{30}} \right) \cdot \frac{\mathbf{9}}{\mathbf{7}} \right] = \\
 & = \left[\left(\frac{\mathbf{39}}{\mathbf{12}} \right) \cdot \frac{\mathbf{4}}{\mathbf{26}} + \left(\frac{\mathbf{6}}{\mathbf{72}} \right) \cdot \frac{\mathbf{12}}{\mathbf{10}} \right] \cdot \left[\left(\frac{\mathbf{28}}{\mathbf{30}} \right) \cdot \frac{\mathbf{9}}{\mathbf{7}} \right] = \\
 & = \left[\frac{\mathbf{1}}{\mathbf{2}} + \frac{\mathbf{1}}{\mathbf{10}} \right] \cdot \left[\frac{\mathbf{12}}{\mathbf{10}} \right] = \\
 & = \left[\frac{\mathbf{6}}{\mathbf{10}} \right] \cdot \left[\frac{\mathbf{12}}{\mathbf{10}} \right] = \\
 & = \left[\frac{\mathbf{6}}{\mathbf{10}} \right] \cdot \left[\frac{\mathbf{6}}{\mathbf{5}} \right] = \frac{\mathbf{18}}{\mathbf{25}}
 \end{aligned}$$

$$\begin{aligned}
 & \left(1 - \frac{5}{7}\right) \cdot \left[\left(3 - \frac{6}{7} - \frac{5}{14}\right) : \left(\frac{5}{6} - \frac{1}{3} - \frac{3}{7}\right) - \frac{5}{12}\right] = \\
 & = \left(\frac{7-5}{7}\right) \cdot \left[\left(\frac{42-12-5}{14}\right) : \left(\frac{35-14-18}{42}\right) - \frac{5}{12}\right] = \\
 & = \frac{2}{7} \cdot \left[\frac{25}{14} : \frac{3}{42} - \frac{5}{12}\right] = \\
 & = \frac{2}{7} \cdot \left[\frac{25}{14} \cdot \frac{42}{3} - \frac{5}{12}\right] = \\
 & = \frac{2}{7} \cdot \left[\frac{25}{2} \cdot \frac{6}{3} - \frac{5}{12}\right] = \\
 & = \frac{2}{7} \cdot \left[25 - \frac{5}{12}\right] = \\
 & = \frac{2}{7} \cdot \left[\frac{250-5}{12}\right] = \\
 & = \frac{2}{7} \cdot \frac{245}{12} = \frac{35}{6}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{3}{4} - \frac{5}{7} \right) : \left(\frac{10}{12} + \frac{4}{9} - 1 \right) \right] : \left\{ \left(\frac{1}{2} - \frac{3}{7} \right) : \left[\left(\frac{3}{4} - \frac{2}{3} \right) : \frac{1}{5} \right] \right\} - \frac{1}{2} = \\
 & = \left[\frac{21-20}{28} : \left(\frac{5}{6} + \frac{4}{9} - 1 \right) \right] : \left\{ \left(\frac{7-6}{14} \right) : \left[\left(\frac{9-8}{12} \right) \cdot \frac{5}{1} \right] \right\} - \frac{1}{2} = \\
 & = \left[\frac{1}{28} : \frac{15+8-18}{18} \right] : \left\{ \frac{1}{14} : \left[\frac{1}{12} \cdot \frac{5}{1} \right] \right\} - \frac{1}{2} = \\
 & = \left[\frac{1}{28} \cdot \frac{18}{5} \right] : \left\{ \frac{1}{14} \cdot \frac{12}{5} \right\} - \frac{1}{2} = \\
 & = \left[\frac{1}{14} \cdot \frac{9}{5} \right] : \left\{ \frac{1}{7} \cdot \frac{6}{5} \right\} - \frac{1}{2} = \\
 & = \frac{9}{70} : \frac{6}{35} - \frac{1}{2} = \\
 & = \frac{9}{70} \cdot \frac{35}{6} - \frac{1}{2} = \\
 & = \frac{3}{2} \cdot \frac{1}{2} - \frac{1}{2} = \\
 & = \frac{3}{4} - \frac{1}{2} = \\
 & = \frac{3-2}{4} = \frac{1}{4}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(1 - \frac{1}{2} \right) \cdot \frac{1}{8} \right] : \left\{ \left[\left(\frac{3}{7} + \frac{1}{6} - \frac{5}{14} \right) \cdot \left(5 + \frac{1}{4} \right) - \frac{1}{2} \right] - \frac{1}{4} \right\} + \frac{1}{2} = \\
 & = \left[\left(\frac{2-1}{2} \right) \cdot \frac{1}{8} \right] : \left\{ \left[\left(\frac{18+7-15}{42} \right) \cdot \frac{21}{4} - \frac{1}{2} \right] - \frac{1}{4} \right\} + \frac{1}{2} = \\
 & = \left[\frac{1}{2} \cdot \frac{1}{8} \right] : \left\{ \left[\frac{10}{42} \cdot \frac{21}{4} - \frac{1}{2} \right] - \frac{1}{4} \right\} - \frac{1}{2} = \\
 & = \frac{1}{16} : \left\{ \frac{3}{4} - \frac{1}{4} \right\} + \frac{1}{2} = \\
 & = \frac{1}{16} : \left\{ \frac{3-1}{4} \right\} + \frac{1}{2} = \\
 & = \frac{1}{16} : \frac{2}{4} + \frac{1}{2} = \\
 & = \frac{1}{8} \cdot \frac{2^1}{1} + \frac{1}{2} = \\
 & = \frac{1}{8} - \frac{1}{2} = \\
 & = \frac{1+4}{8} = \frac{5}{8}
 \end{aligned}$$

$$\begin{aligned} & \left(3 + \frac{6}{8} - \frac{14}{7}\right) \cdot \frac{2}{7} \cdot \left(\frac{1}{4} - \frac{1}{6}\right) - \frac{1}{24} = \\ & = \left(3 + \frac{3}{4} - \frac{2}{1}\right) \cdot \frac{2}{7} \cdot \left(\frac{3-2}{12}\right) - \frac{1}{24} = \\ & = \frac{12+3-8}{4} \cdot \frac{2}{7} \cdot \frac{1}{12} - \frac{1}{24} = \\ & = \frac{7}{4} \cdot \frac{2}{7} \cdot \frac{1}{12} - \frac{1}{24} = \\ & = \frac{1}{2} \cdot \frac{1}{12} - \frac{1}{24} = \\ & = \frac{1}{24} - \frac{1}{24} = 0 \end{aligned}$$

$$\begin{aligned}
 & \frac{21}{26} \cdot \frac{7}{13} + 3 \cdot \frac{5}{6} + \left(1 - \frac{3}{4}\right) - \left(1 - \frac{9}{28}\right) = \\
 & = \frac{21}{26} \cdot \frac{13}{7} + 1 \cdot \frac{5}{2} + \left(\frac{4-3}{4}\right) - \left(\frac{28-9}{28}\right) = \\
 & = \frac{3}{2} + \frac{5}{2} + \frac{1}{4} - \frac{19}{28} = \\
 & = \frac{42+70+7-19}{28} = \\
 & = \frac{100}{28} = \frac{50}{14} = \frac{25}{7}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{3}{4} + \frac{2}{3}\right) \cdot \frac{3}{34} + \left(\frac{1}{3} - \frac{1}{4}\right) \cdot \frac{3}{2} - \left(1 - \frac{3}{4}\right) \cdot \frac{1}{3} \right] : \frac{3}{2} + \frac{5}{7} : \left(1 + \frac{2}{7}\right) - \frac{1}{3} = \\
 & = \left[\frac{9+8}{12} \cdot \frac{3}{34} + \frac{4-3}{12} \cdot \frac{3}{2} - \frac{4-3}{4} \cdot \frac{1}{3} \right] \cdot \frac{2}{3} + \frac{5}{7} : \left(\frac{7+2}{7}\right) - \frac{1}{3} = \\
 & = \left[\frac{17}{12} \cdot \frac{3}{34} + \frac{1}{12} \cdot \frac{3}{2} - \frac{1}{4} \cdot \frac{1}{3} \right] \cdot \frac{2}{3} + \frac{5}{7} : \frac{9}{7} - \frac{1}{3} = \\
 & = \left[\frac{1}{8} + \frac{1}{8} - \frac{1}{12} \right] \cdot \frac{2}{3} + \frac{5}{7} \cdot \frac{7}{9} - \frac{1}{3} = \\
 & = \left[\frac{2^1}{8_4} - \frac{1}{12} \right] \cdot \frac{2}{3} + \frac{5}{9} - \frac{1}{3} = \\
 & = \left[\frac{3-1}{12} \right] \cdot \frac{2}{3} + \frac{5}{9} - \frac{1}{3} = \\
 & = \left[\frac{2}{12} \right] \cdot \frac{2}{3} + \frac{5}{9} - \frac{1}{3} = \\
 & = \frac{1}{9} + \frac{5}{9} - \frac{1}{3} = \\
 & = \frac{6^2}{9_3} - \frac{1}{3} = \frac{1}{3}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\frac{2}{3} - \left(\frac{1}{8} + \frac{1}{4} \right) \cdot \frac{2}{3} \right] : \left(3 + \frac{1}{3} \right) + \left(1 + \frac{1}{3} \right) : 8 = \\
 & = \left[\frac{2}{3} - \left(\frac{1+2}{8} \right) \cdot \frac{2}{3} \right] : \left(\frac{9+1}{3} \right) + \left(\frac{3+1}{3} \right) \cdot \frac{1}{8} = \\
 & = \left[\frac{2}{3} - \frac{3}{8} \cdot \frac{2}{3} \right] : \frac{10}{3} + \frac{4}{3} \cdot \frac{1}{8} = \\
 & = \left[\frac{2}{3} - \frac{1}{4} \right] \cdot \frac{3}{10} + \frac{1}{6} = \\
 & = \left[\frac{8-3}{12} \right] \cdot \frac{3}{10} + \frac{1}{6} = \\
 & = \frac{5}{12} \cdot \frac{3}{10} + \frac{1}{6} = \\
 & = \frac{1}{8} + \frac{1}{6} = \\
 & = \frac{3+4}{24} = \frac{7}{24}
 \end{aligned}$$

$$\begin{aligned} & 1 + \left(1 - \frac{3}{5}\right) \cdot \left(3 + \frac{1}{3}\right) - \frac{4}{3} : \left(1 + \frac{1}{3}\right) + \frac{14}{5} \cdot \frac{1}{7} + 3 : \left(2 + \frac{4}{3}\right) = \\ & = 1 + \left(\frac{5-3}{5}\right) \cdot \left(\frac{9+1}{3}\right) - \frac{4}{3} : \left(\frac{3+1}{3}\right) + \frac{2}{5} + 3 : \left(\frac{6+4}{3}\right) = \\ & = 1 + \frac{2}{5} \cdot \frac{10}{3} - \frac{4}{3} \cdot \frac{3}{4} + \frac{2}{5} + 3 \cdot \frac{3}{10} = \\ & = 1 + \frac{4}{3} - 1 + \frac{2}{5} + \frac{9}{10} = \end{aligned}$$

posso semplificare 1 ... -1=0

$$\begin{aligned} & = \frac{4}{3} + \frac{2}{5} + \frac{9}{10} = \\ & = \frac{40 + 12 + 27}{30} = \frac{79}{30} \end{aligned}$$

$$\begin{aligned}
 & \left\{ \frac{1}{7} \cdot \left[\left(\frac{3}{4} + \frac{5}{6} \right) \cdot \left(1 + \frac{5}{19} \right) - \frac{2}{3} \cdot \frac{2}{3} \right] + \frac{4}{5} : 2 \right\} \cdot \frac{15}{28} = \\
 & = \left\{ \frac{1}{7} \cdot \left[\frac{9+10}{12} \cdot \frac{19+5}{19} - \frac{2}{3} \cdot \frac{2}{3} \right] + \frac{4}{5} \cdot \frac{1}{2} \right\} \cdot \frac{15}{28} = \\
 & = \left\{ \frac{1}{7} \cdot \left[\frac{19}{12} \cdot \frac{24}{19} - \frac{4}{9} \right] + \frac{2}{5} \right\} \cdot \frac{15}{28} = \\
 & = \left\{ \frac{1}{7} \cdot \left[2 - \frac{4}{9} \right] + \frac{2}{5} \right\} \cdot \frac{15}{28} = \\
 & = \left\{ \frac{1}{7} \cdot \frac{18-4}{9} + \frac{2}{5} \right\} \cdot \frac{15}{28} = \\
 & = \left\{ \frac{1}{7} \cdot \frac{14}{9} + \frac{2}{5} \right\} \cdot \frac{15}{28} = \\
 & = \left\{ \frac{2}{9} + \frac{2}{5} \right\} \cdot \frac{15}{28} = \\
 & = \frac{10+18}{45} \cdot \frac{15}{28} = \\
 & = \frac{28}{45} \cdot \frac{15}{28} = \frac{1}{3}
 \end{aligned}$$

$$\begin{aligned}
 & \left\{ \left[\frac{4}{7} + \frac{16}{15} \cdot \left(\frac{5}{56} - \frac{5}{28} \div \frac{5}{2} + \frac{1}{4} \right) \right] \div \frac{4}{7} - \frac{5}{12} \right\} \div \frac{13}{16} + \frac{9}{4} \div \frac{3}{4} = \\
 & = \left\{ \left[\frac{4}{7} + \frac{16}{15} \cdot \left(\frac{5}{56} - \frac{5}{28} \cdot \frac{2}{5} + \frac{1}{4} \right) \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{16}{13} + \frac{9}{4} \cdot \frac{4}{3} = \\
 & = \left\{ \left[\frac{4}{7} + \frac{16}{15} \cdot \left(\frac{5}{56} - \frac{1}{14} + \frac{1}{4} \right) \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{16}{13} + 3 = \\
 & = \left\{ \left[\frac{4}{7} + \frac{16}{15} \cdot \left(\frac{5}{56} - \frac{1}{14} + \frac{1}{4} \right) \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{16}{13} + 3 = \\
 & = \left\{ \left[\frac{4}{7} + \frac{16}{15} \cdot \frac{15}{56} \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{16}{13} + 3 = \\
 & = \left\{ \left[\frac{4}{7} + \frac{2}{7} \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{16}{13} + 3 = \\
 & = \left\{ \frac{6}{7} \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{16}{13} + 3 = \\
 & = \left\{ \frac{3}{2} - \frac{5}{12} \right\} \cdot \frac{16}{13} + 3 = \\
 & = \left\{ \frac{18-5}{12} \right\} \cdot \frac{16}{13} + 3 = \\
 & = \frac{13}{12} \cdot \frac{16}{13} + 3 = \\
 & = \frac{4}{3} + 3 = \\
 & = \frac{4+9}{3} = \frac{13}{3}
 \end{aligned}$$

$$\begin{aligned}
 &= \left\{ \left[\frac{4}{7} + \frac{16}{15} \cdot \left(\frac{5}{56} + \frac{1}{14} + \frac{1}{4} \right) \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{36}{13} - \frac{9}{4} \cdot \frac{4}{3} = \\
 &= \left\{ \left[\frac{4}{7} + \frac{16}{15} \cdot \frac{5-4+14}{56} \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{36}{13} - 3 = \\
 &= \left\{ \left[\frac{4}{7} + \frac{16}{15} \cdot \frac{15}{56} \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{36}{13} - 3 = \\
 &= \left\{ \left[\frac{4}{7} + \frac{2}{7} \right] \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{36}{13} - 3 = \\
 &= \left\{ \frac{6}{7} \cdot \frac{7}{4} - \frac{5}{12} \right\} \cdot \frac{36}{13} - 3 = \\
 &= \left\{ \frac{3}{2} - \frac{5}{12} \right\} \cdot \frac{36}{13} - 3 = \\
 &= \frac{18-5}{12} \cdot \frac{36}{13} - 3 = \\
 &= \frac{13}{12} \cdot \frac{36}{13} - 3 = \\
 &= 3 - 3 = 0
 \end{aligned}$$

$$\begin{aligned}
 & \left\{ \frac{5}{6} - \left[\frac{2}{3} + \left(\frac{3}{4} - \frac{4}{9} \right) - \left(1 - \frac{7}{3} \cdot \frac{1}{4} \right) \right] + \frac{2}{3} : \frac{8}{9} \right\} \cdot \frac{36}{37} = \\
 & = \left\{ \frac{5}{6} - \left[\frac{2}{3} + \left(\frac{27-16}{36} \right) - \left(1 - \frac{7}{12} \right) \right] + \frac{2}{3} \cdot \frac{9}{8} \right\} \cdot \frac{36}{37} = \\
 & = \left\{ \frac{5}{6} - \left[\frac{2}{3} + \frac{11}{36} - \left(\frac{12-7}{12} \right) \right] + \frac{3}{4} \right\} \cdot \frac{36}{37} = \\
 & = \left\{ \frac{5}{6} - \left[\frac{2}{3} + \frac{11}{36} - \frac{5}{12} \right] + \frac{3}{4} \right\} \cdot \frac{36}{37} = \\
 & = \left\{ \frac{5}{6} - \left[\frac{24+11-15}{36} \right] + \frac{3}{4} \right\} \cdot \frac{36}{37} = \\
 & = \left\{ \frac{5}{6} - \frac{20}{36} + \frac{3}{4} \right\} \cdot \frac{36}{37} = \\
 & = \left\{ \frac{30-20+27}{36} \right\} \cdot \frac{36}{37} = \\
 & = \frac{37}{36} \cdot \frac{36}{37} = 1
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{23}{4} - \frac{31}{8} \right) : \left(\frac{29}{6} - \frac{11}{3} \right) - \left(\frac{4}{7} + \frac{5}{4} \right) \cdot \frac{7}{17} \right] \cdot \frac{49}{36} - \left(\frac{3}{12} - \frac{1}{6} \right) = \\
 & = \left[\left(\frac{46-31}{8} \right) : \left(\frac{29-22}{6} \right) - \left(\frac{16+35}{28} \right) \cdot \frac{7}{17} \right] \cdot \frac{49}{36} - \left(\frac{3-2}{12} \right) = \\
 & = \left[\frac{15}{8} \cdot \frac{6}{7} - \frac{51}{28} \cdot \frac{7}{17} \right] \cdot \frac{49}{36} - \frac{1}{12} = \\
 & = \left[\frac{45}{28} - \frac{3}{4} \right] \cdot \frac{49}{36} - \frac{1}{12} = \\
 & = \left[\frac{45-21}{28} \right] \cdot \frac{49}{36} - \frac{1}{12} = \\
 & = \frac{24}{28} \cdot \frac{49}{36} - \frac{1}{12} = \\
 & = \frac{7}{6} - \frac{1}{12} = \\
 & = \frac{14-1}{12} = \frac{13}{12}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{3}{2} - \frac{37}{60} + \frac{4}{15} \right) : \left(\frac{21}{10} - \frac{37}{20} \right) - \frac{25}{2} \cdot \left(\frac{9}{10} - \frac{3}{25} - \frac{3}{4} \right) \right] \cdot \frac{10}{13} - \frac{9}{4} = \\
 & = \left[\left(\frac{90 - 37 + 16}{60} \right) : \left(\frac{42 - 37}{20} \right) - \frac{25}{2} \cdot \left(\frac{90 - 12 - 75}{100} \right) \right] \cdot \frac{10}{13} - \frac{9}{4} = \\
 & = \left[\frac{69}{60} \cdot \frac{20}{5} - \frac{25}{2} \cdot \frac{3}{100} \right] \cdot \frac{10}{13} - \frac{9}{4} = \\
 & = \left[\frac{23}{5} - \frac{3}{8} \right] \cdot \frac{10}{13} - \frac{9}{4} = \\
 & = \left[\frac{184 - 15}{40} \right] \cdot \frac{10}{13} - \frac{9}{4} = \\
 & = \frac{169}{40} \cdot \frac{10}{13} - \frac{9}{4} = \\
 & = \frac{13}{4} - \frac{9}{4} = \frac{4}{4} = 1
 \end{aligned}$$

$$\begin{aligned}
 & \left\{ \frac{8}{5} + \left[\frac{8}{7} - \left(\frac{2}{3} + \frac{4}{5} \right) \cdot \frac{15}{22} \right] \cdot \frac{7}{3} \right\} : \frac{29}{15} = \\
 & = \left\{ \frac{8}{5} + \left[\frac{8}{7} - \left(\frac{10+12}{15} \right) \cdot \frac{15}{22} \right] \cdot \frac{7}{3} \right\} \cdot \frac{15}{29} = \\
 & = \left\{ \frac{8}{5} + \left[\frac{8}{7} - \frac{22}{15} \cdot \frac{15}{22} \right] \cdot \frac{7}{3} \right\} \cdot \frac{15}{29} = \\
 & = \left\{ \frac{8}{5} + \left[\frac{8-7}{7} \right] \cdot \frac{7}{3} \right\} \cdot \frac{15}{29} = \\
 & = \left\{ \frac{8}{5} + \frac{1}{7} \cdot \frac{7}{3} \right\} \cdot \frac{15}{29} = \\
 & = \left\{ \frac{8}{5} + \frac{1}{3} \right\} \cdot \frac{15}{29} = \\
 & = \left\{ \frac{24+5}{15} \right\} \cdot \frac{15}{29} = \\
 & = \frac{29}{15} \cdot \frac{15}{29} = 1
 \end{aligned}$$

$$\begin{aligned}
 & \frac{2}{3} + \frac{4}{33} \cdot \left\{ \left[\frac{5}{73} \cdot \left(\frac{28}{5} - \frac{1}{8} \right) - \left(\frac{2}{15} + \frac{4}{9} - \frac{1}{3} \right) \cdot \frac{9}{22} \right] \cdot \left(\frac{7}{5} - \frac{1}{8} : \frac{1}{4} + \frac{8}{3} - \frac{7}{30} \right) \right\} = \\
 & = \frac{2}{3} + \frac{4}{33} \cdot \left\{ \left[\frac{5}{73} \cdot \frac{219}{40} - \frac{11}{45} \cdot \frac{9}{22} \right] \cdot \left(\frac{7}{5} - \frac{1}{2} + \frac{8}{3} - \frac{7}{30} \right) \right\} = \\
 & = \frac{2}{3} + \frac{4}{33} \cdot \left\{ \left[\frac{3}{8} - \frac{1}{10} \right] \cdot \left(\frac{100}{30} \right) \right\} = \\
 & = \frac{2}{3} + \frac{4}{33} \cdot \left\{ \left[\frac{11}{40} \right] \cdot \left(\frac{10}{3} \right) \right\} = \\
 & = \frac{2}{3} + \frac{4}{33} \cdot \frac{11}{12} = \\
 & = \frac{2}{3} + \frac{1}{9} = \\
 & = \frac{6+1}{9} = \frac{7}{9}
 \end{aligned}$$

$$\begin{aligned}
 & \left\{ \left[\frac{7}{5} \cdot \left(\frac{3}{5} : \frac{7}{5} + 1 \right) \cdot \frac{10}{2} \right] : \frac{5}{2} + \frac{1}{4} \right\} : \frac{17}{5} = \\
 & = \left\{ \left[\frac{7}{5} \cdot \left(\frac{3}{5} \cdot \frac{5}{7} + 1 \right) \cdot 5 \right] \cdot \frac{2}{5} + \frac{1}{4} \right\} \cdot \frac{5}{17} = \\
 & = \left\{ \left[\frac{7}{5} \cdot \left(\frac{3}{7} + 1 \right) \cdot 5 \right] \cdot \frac{2}{5} + \frac{1}{4} \right\} \cdot \frac{5}{17} = \\
 & = \left\{ \left[\frac{7}{5} \cdot \left(\frac{10}{7} \right) \cdot 5 \right] \cdot \frac{2}{5} + \frac{1}{4} \right\} \cdot \frac{5}{17} = \\
 & = \left\{ \left[\frac{7}{5} \cdot \frac{10}{7} \cdot 5 \right] \cdot \frac{2}{5} + \frac{1}{4} \right\} \cdot \frac{5}{17} = \\
 & = \left\{ 10 \cdot \frac{2}{5} + \frac{1}{4} \right\} \cdot \frac{5}{17} = \\
 & = \left\{ 4 + \frac{1}{4} \right\} \cdot \frac{5}{17} = \\
 & = \frac{17}{4} \cdot \frac{5}{17} = \frac{5}{4}
 \end{aligned}$$

$$\begin{aligned}
 & 2 + \left[\left(\frac{8}{5} - \frac{3}{2} \right) + \left(\frac{4}{3} - 1 \right) \right] : \frac{26}{5} = \\
 & = 2 + \left[\left(\frac{16-15}{10} \right) + \left(\frac{4-3}{3} \right) \right] \cdot \frac{5}{26} = \\
 & = 2 + \left[\frac{1}{10} + \frac{1}{3} \right] \cdot \frac{5}{26} = \\
 & = 2 + \left[\frac{3+10}{30} \right] \cdot \frac{5}{26} = \\
 & = 2 + \frac{13}{30} \cdot \frac{5}{26} = \\
 & = 2 + \frac{1}{12} = \\
 & = \frac{24+1}{12} = \frac{25}{12}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{22}{15} \cdot \left[\frac{5}{6} + \left(10 + \frac{1}{2} \right) : \frac{7}{10} - \frac{1}{3} \cdot \frac{5}{2} \right] + \frac{3}{7} \cdot \frac{14}{12} = \\
 & = \frac{22}{15} \cdot \left[\frac{5}{6} + \left(\frac{20+1}{2} \right) \cdot \frac{10}{7} - \frac{5}{6} \right] + \frac{2}{4} = \frac{5}{6} - \frac{5}{6} = 0 \\
 & = \frac{22}{15} \cdot \left[\left(\frac{21}{2} \right) \cdot \frac{10}{7} \right] + \frac{1}{2} = \\
 & = \frac{22}{15} \cdot 15 + \frac{1}{2} = \\
 & = 22 + \frac{1}{2} = \\
 & = \frac{44+1}{2} = \frac{45}{2}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{14}{3} + \frac{17}{9} \right) : \frac{59}{9} + \left(\frac{31}{9} + \frac{2}{3} \right) \right] : \left(1 + \frac{37}{9} \right) = \\
 & = \left[\left(\frac{42+17}{9} \right) : \frac{59}{9} + \left(\frac{31+6}{9} \right) \right] : \left(\frac{9+37}{9} \right) = \\
 & = \left[\frac{59}{9} \cdot \frac{9}{59} + \frac{37}{9} \right] \cdot \frac{9}{46} = \\
 & = \left[1 + \frac{37}{9} \right] \cdot \frac{9}{46} = \\
 & = \frac{46}{9} \cdot \frac{9}{46} = 1
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(2 - \frac{4}{10} \right) \cdot \frac{3}{4} - \left(\frac{13}{20} - \frac{6}{10} \right) : \frac{3}{4} \right] : \left(\frac{5}{4} - \frac{11}{12} \right) = \\
 & = \left[\left(2 - \frac{2}{5} \right) \cdot \frac{3}{4} - \left(\frac{13}{20} - \frac{3}{5} \right) : \frac{3}{4} \right] : \left(\frac{5}{4} - \frac{11}{12} \right) = \\
 & = \left[\left(\frac{10-2}{5} \right) \cdot \frac{3}{4} - \left(\frac{13-12}{20} \right) \cdot \frac{4}{3} \right] : \left(\frac{15-11}{12} \right) = \\
 & = \left[\frac{8}{5} \cdot \frac{3}{4} - \frac{1}{20} \cdot \frac{4}{3} \right] : \frac{4}{12} = \\
 & = \left[\frac{6}{5} - \frac{1}{15} \right] : \frac{1}{3} = \\
 & = \left[\frac{18-1}{15} \right] \cdot \frac{3}{1} = \\
 & = \frac{17}{15} \cdot \frac{3}{1} = \frac{17}{5}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(\frac{3}{2} - \frac{1}{3} \right) : \left(2 - \frac{1}{4} \right) - \left(\frac{1}{3} - \frac{1}{4} \right) \right] : \left(\frac{2}{7} - \frac{1}{7} \right) = \\
 & = \left[\frac{9-2}{6} : \frac{8-1}{4} - \frac{4-3}{12} \right] : \frac{2-1}{7} = \\
 & = \left[\frac{7}{6} \cdot \frac{4}{7} - \frac{1}{12} \right] : \frac{1}{7} = \\
 & = \left[\frac{2}{3} - \frac{1}{12} \right] \cdot 7 = \\
 & = \frac{8-1}{12} \cdot 7 = \\
 & = \frac{7}{12} \cdot 7 = \frac{49}{12}
 \end{aligned}$$

$$\begin{aligned}
 & \left(\frac{3}{5} + \frac{2}{3}\right) + \left(\frac{25}{8} \cdot \frac{1}{9} + \frac{5}{12}\right) : \left(\frac{5}{4} \cdot \frac{5}{2} \cdot \frac{1}{3}\right) = \\
 & = \left(\frac{9+10}{15}\right) + \left(\frac{25}{72} + \frac{5}{12}\right) : \frac{25}{24} = \\
 & = \frac{19}{15} + \left(\frac{25+30}{72}\right) \cdot \frac{24}{25} = \\
 & = \frac{19}{15} + \frac{55}{72} \cdot \frac{24}{25} = \\
 & = \frac{19}{15} + \frac{11}{15} = \\
 & = \frac{19+11}{15} = \frac{30}{15} = 2
 \end{aligned}$$

$$\begin{aligned}
 & \left(1 - \frac{4}{5}\right) - \frac{1}{3} \cdot \left[\frac{3}{2} - \left(\frac{4}{5} : \frac{8}{3} + \frac{3}{4}\right)\right] : \left(5 - \frac{1}{2}\right) + \frac{9}{10} : \left(4 - \frac{2}{5}\right) = \\
 & = \left(\frac{5-4}{5}\right) - \frac{1}{3} \cdot \left[\frac{3}{2} - \left(\frac{4}{5} \cdot \frac{3}{8} + \frac{3}{4}\right)\right] : \left(\frac{10-1}{2}\right) + \frac{9}{10} : \left(\frac{20-2}{5}\right) = \\
 & = \frac{1}{5} - \frac{1}{3} \cdot \left[\frac{3}{2} - \left(\frac{3}{10} + \frac{3}{4}\right)\right] : \frac{9}{2} + \frac{9}{10} : \frac{18}{5} = \\
 & = \frac{1}{5} - \frac{1}{3} \cdot \left[\frac{3}{2} - \left(\frac{6+15}{20}\right)\right] \cdot \frac{2}{9} + \frac{9}{10} \cdot \frac{5}{18} = \\
 & = \frac{1}{5} - \frac{1}{3} \cdot \left[\frac{3}{2} - \frac{21}{20}\right] \cdot \frac{2}{9} + \frac{1}{4} = \\
 & = \frac{1}{5} - \frac{1}{3} \cdot \left[\frac{30-21}{20}\right] \cdot \frac{2}{9} + \frac{1}{4} = \\
 & = \frac{1}{5} - \frac{1}{3} \cdot \frac{9}{20} \cdot \frac{2}{9} + \frac{1}{4} = \\
 & = \frac{1}{5} - \frac{1}{30} + \frac{1}{4} = \\
 & = \frac{12-2+15}{60} = \\
 & = \frac{25}{60} = \frac{5}{12}
 \end{aligned}$$

$$\begin{aligned}
 & \left(2 - \frac{1}{2}\right) - \left\{ \left[\frac{6}{2} \cdot \left(\frac{11}{6} - \frac{7}{4} \right) \right] : \left[1 - \left(\frac{5}{2} - \frac{3}{4} \right) : \frac{21}{5} \right] \right\} : \frac{5}{7} = \\
 & = \left(\frac{4-1}{2} \right) - \left\{ \left[3 \cdot \left(\frac{22-21}{12} \right) \right] : \left[1 - \left(\frac{10-3}{4} \right) \cdot \frac{5}{21} \right] \right\} : \frac{7}{5} = \\
 & = \frac{3}{2} - \left\{ \left[3 \cdot \frac{1}{12} \right] : \left[1 - \frac{7}{4} \cdot \frac{5}{21} \right] \right\} : \frac{7}{5} = \\
 & = \frac{3}{2} - \left\{ \frac{1}{4} : \left[1 - \frac{5}{12} \right] \right\} : \frac{7}{5} = \\
 & = \frac{3}{2} - \left\{ \frac{1}{4} : \frac{12-5}{12} \right\} : \frac{7}{5} = \\
 & = \frac{3}{2} - \left\{ \frac{1}{4} \cdot \frac{12}{7} \right\} : \frac{7}{5} = \\
 & = \frac{3}{2} - \frac{3}{7} \cdot \frac{7}{5} = \\
 & = \frac{3}{2} - \frac{3}{5} = \\
 & = \frac{15-6}{10} = \frac{9}{10}
 \end{aligned}$$

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

$$\begin{aligned}
 & \left\{ \left[\left(\frac{6}{5} - \frac{1}{10} \right) : \left(2 + \frac{1}{5} \right) \right] : \left[\left(\frac{2}{3} : \frac{5}{6} + \frac{1}{10} \right) : \frac{3}{25} \right] \right\} : \frac{7}{30} = \\
 & = \left\{ \left[\left(\frac{12-1}{10} \right) : \left(\frac{10+1}{5} \right) \right] : \left[\left(\frac{2}{3} \cdot \frac{6}{5} + \frac{1}{10} \right) \cdot \frac{25}{3} \right] \right\} \cdot \frac{30}{7} = \\
 & = \left\{ \left[\frac{11}{10} : \frac{11}{5} \right] : \left[\left(\frac{4}{5} + \frac{1}{10} \right) \cdot \frac{25}{3} \right] \right\} \cdot \frac{30}{7} = \\
 & = \left\{ \left[\frac{11}{10} \cdot \frac{5}{11} \right] : \left[\left(\frac{8+1}{10} \right) \cdot \frac{25}{3} \right] \right\} \cdot \frac{30}{7} = \\
 & = \left\{ \frac{1}{2} : \left[\frac{9}{10} \cdot \frac{25}{3} \right] \right\} \cdot \frac{30}{7} = \\
 & = \left\{ \frac{1}{2} : \frac{15}{2} \right\} \cdot \frac{30}{7} = \\
 & = \left\{ \frac{1}{2} \cdot \frac{2}{15} \right\} \cdot \frac{30}{7} = \\
 & = \frac{1}{15} \cdot \frac{30}{7} = \frac{2}{7}
 \end{aligned}$$

$$\begin{aligned}
 & \left(1 - \frac{1}{5}\right) - \left(1 - \frac{2}{3}\right) \cdot \left[\left(1 + \frac{1}{2}\right) - \left(\frac{4}{5} \cdot \frac{8}{3} + \frac{3}{4}\right)\right] \cdot \frac{9}{2} + \left(1 - \frac{1}{10}\right) : \left(4 - \frac{2}{5}\right) = \\
 & = \left(\frac{5-1}{5}\right) - \left(\frac{3-2}{3}\right) \cdot \left[\left(\frac{2+1}{2}\right) - \left(\frac{4}{5} \cdot \frac{8}{3} + \frac{3}{4}\right)\right] \cdot \frac{9}{2} + \left(\frac{10-1}{10}\right) : \left(\frac{20-2}{5}\right) = \\
 & = \frac{4}{5} - \frac{1}{3} \cdot \left[\frac{3}{2} - \left(\frac{3}{10} + \frac{3}{4}\right)\right] \cdot \frac{9}{2} + \frac{9}{10} : \frac{18}{5} = \\
 & = \frac{4}{5} - \frac{1}{3} \cdot \left[\frac{3}{2} - \left(\frac{6+15}{20}\right)\right] \cdot \frac{9}{2} + \frac{9}{10} \cdot \frac{5}{18} = \\
 & = \frac{4}{5} - \frac{1}{3} \cdot \left[\frac{3}{2} - \frac{21}{20}\right] \cdot \frac{9}{2} + \frac{1}{4} = \\
 & = \frac{4}{5} - \frac{1}{3} \cdot \left[\frac{30-21}{20}\right] \cdot \frac{9}{2} + \frac{1}{4} = \\
 & = \frac{4}{5} - \frac{1}{3} \cdot \frac{9}{20} \cdot \frac{9}{2} + \frac{1}{4} = \\
 & = \frac{4}{5} - \frac{27}{40} + \frac{1}{4} = \\
 & = \frac{32-27+10}{40} = \\
 & = \frac{15}{40} = \frac{3}{8}
 \end{aligned}$$

$$\begin{aligned}
 & \left\{ \left(1 - \frac{1}{4} \right) \cdot \left[\frac{7}{3} : \frac{7}{6} + \frac{9}{3} - \frac{3}{2} : \left(1 - \frac{1}{2} \right) \right] - \frac{1}{6} \right\} : \frac{20}{9} = \\
 & = \left\{ \frac{3}{4} \cdot \left[\frac{7}{3} \cdot \frac{6}{7} + 3 - \frac{3}{2} \cdot \frac{2}{1} \right] - \frac{1}{6} \right\} \cdot \frac{9}{20} = \\
 & = \left\{ \frac{3}{4} \cdot [2 + 3 - 3] - \frac{1}{6} \right\} \cdot \frac{9}{20} = \\
 & = \left\{ \frac{3}{4} \cdot 2 - \frac{1}{6} \right\} \cdot \frac{9}{20} = \\
 & = \left\{ \frac{3}{2} - \frac{1}{6} \right\} \cdot \frac{9}{20} = \\
 & = \frac{9-1}{6} \cdot \frac{9}{20} = \\
 & = \frac{8}{2} \cdot \frac{3}{20} = \\
 & = \frac{2}{2} \cdot \frac{3}{5} = \frac{3}{5}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(1 - \frac{2}{3} \right) : \frac{5}{6} \right] \cdot \left[\left(1 - \frac{11}{13} \right) \cdot \left(\frac{3}{4} + \frac{5}{2} \right) \right] : \left[\left(1 + \frac{1}{5} \right) \cdot \left(\frac{5}{4} - \frac{7}{6} \right) \right] = \\
 & = \left[\left(\frac{3-2}{3} \right) : \frac{5}{6} \right] \cdot \left[\left(\frac{13-11}{13} \right) \cdot \left(\frac{3+10}{4} \right) \right] : \left[\left(\frac{5+1}{5} \right) \cdot \left(\frac{15-14}{12} \right) \right] = \\
 & = \left[\frac{1}{3} : \frac{5}{6} \right] \cdot \left[\frac{2}{13} \cdot \frac{13}{4} \right] : \left[\frac{6}{5} \cdot \frac{1}{12} \right] = \\
 & = \left[\frac{1}{3_1} : \frac{5}{6_2} \right] \cdot \frac{1}{2} : \left[\frac{1}{5} \cdot \frac{1}{2} \right] = \\
 & = \frac{2}{5} \cdot \frac{1}{2} : \frac{1}{10} = \\
 & = \frac{1}{5} \cdot \frac{10}{1} = 2
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(1 - \frac{1}{2} \right) + \left(\frac{5}{3} - \frac{2}{5} \right) : \frac{19}{3} \right] \cdot \left\{ 1 : \left[\left(1 + \frac{7}{4} \right)^2 : \left(2 + \frac{3}{4} \right) \right] : \frac{4}{11} \right\} = \\
 & = \left[\frac{1}{2} + \left(\frac{25-6}{15} \right) \cdot \frac{3}{19} \right] \cdot \left\{ 1 : \left[\left(\frac{11}{4} \right)^2 : \left(\frac{11}{4} \right) \right] \cdot \frac{11}{4} \right\} = \\
 & = \left[\frac{1}{2} + \frac{19}{15} \cdot \frac{3}{19} \right] \cdot \left\{ 1 : \left[\left(\frac{11}{4} \right)^{2-1} \right] \cdot \frac{11}{4} \right\} = \\
 & = \left[\frac{1}{2} + \frac{1}{5} \right] \cdot \left\{ 1 : \frac{11}{4} \cdot \frac{11}{4} \right\} = \\
 & = \left[\frac{7}{10} \right] \cdot \left\{ 1 \cdot \frac{4}{11} \cdot \frac{11}{4} \right\} = \frac{7}{10}
 \end{aligned}$$

$$\begin{aligned}
 & \left(1 + \frac{5}{4} \right) \cdot \left[1 + \left(1 - \frac{1}{2} \right) \cdot \left(1 - \frac{1}{2} \right) \right] : \left[\frac{1}{2} + 1 : \left(1 + \frac{1}{3} \right) \right] = \\
 & = \left(\frac{9}{4} \right) \cdot \left[1 + \left(\frac{1}{2} \right) \cdot \left(\frac{1}{2} \right) \right] : \left[\frac{1}{2} + 1 : \left(\frac{4}{3} \right) \right] = \\
 & = \frac{9}{4} \cdot \left[1 + \frac{1}{4} \right] : \left[\frac{1}{2} + \frac{3}{4} \right] = \\
 & = \frac{9}{4} \cdot \frac{5}{4} : \left[\frac{2+3}{4} \right] = \\
 & = \frac{9}{4} \cdot \frac{5}{4} \cdot \frac{4}{5} = \frac{9}{4}
 \end{aligned}$$

$$\begin{aligned} & \left[\left(\frac{17}{45} - \frac{1}{10} \right) \cdot \frac{2}{5} + \frac{11}{12} : \frac{11}{2} \right] : \left(1 + \frac{2}{3} - \frac{11}{9} \right) = \\ & = \left[\left(\frac{34 - 9}{90} \right) \cdot \frac{2}{5} + \frac{1}{6} \right] : \left(\frac{9 + 6 - 11}{9} \right) = \\ & = \left[\frac{25}{90} \cdot \frac{2}{5} + \frac{1}{6} \right] : \frac{4}{9} = \\ & = \left[\frac{5}{45} + \frac{1}{6} \right] \cdot \frac{9}{4} = \\ & = \left[\frac{1}{9} + \frac{1}{6} \right] \cdot \frac{9}{4} = \\ & = \frac{2 + 3}{18} \cdot \frac{9}{4} = \\ & = \frac{5}{18} \cdot \frac{9}{4} = \\ & = \frac{5}{2} \cdot \frac{1}{4} = \frac{5}{8} \end{aligned}$$

$$\begin{aligned} & \left[\left(\frac{3}{8} + \frac{2}{3} \right) : \left(\frac{1}{4} + \frac{5}{6} - 1 \right) - \left(3 - \frac{1}{2} \right) \right] : \left(1 - \frac{3}{5} \right) \cdot \frac{1}{3} = \\ & = \left[\left(\frac{9 + 16}{24} \right) : \left(\frac{3 + 10 - 12}{12} \right) - \left(\frac{6 - 1}{2} \right) \right] : \left(\frac{5 - 3}{5} \right) \cdot \frac{1}{3} = \\ & = \left[\frac{25}{24} : \frac{1}{12} - \frac{5}{2} \right] : \frac{2}{5} \cdot \frac{1}{3} = \\ & = \left[\frac{25}{2} - \frac{5}{2} \right] \cdot \frac{5}{2} \cdot \frac{1}{3} = \\ & = \frac{20}{2} \cdot \frac{5}{2} \cdot \frac{1}{3} = \frac{25}{3} \end{aligned}$$

$$\begin{aligned}
 & \left[\frac{1}{3} \cdot \left(\frac{1}{3} + \frac{1}{2} \right) : 5 + \frac{1}{9} \right] \cdot \frac{1}{3} + \frac{5}{6} - \left(1 - \frac{2}{3} \right) \cdot \frac{1}{3} = \\
 & = \left[\frac{1}{3} \cdot \left(\frac{2+3}{6} \right) \cdot \frac{1}{5} + \frac{1}{9} \right] \cdot \frac{1}{3} + \frac{5}{6} - \left(\frac{3-2}{3} \right) \cdot \frac{1}{3} = \\
 & = \left[\frac{1}{3} \cdot \frac{5}{6} \cdot \frac{1}{3} + \frac{1}{9} \right] \cdot \frac{1}{3} + \frac{5}{6} - \frac{1}{3} \cdot \frac{1}{3} = \\
 & = \left[\frac{1}{18} + \frac{1}{9} \right] \cdot \frac{1}{3} + \frac{5}{6} - \frac{1}{9} = \\
 & = \left[\frac{1+2}{18} \right] \cdot \frac{1}{3} + \frac{5}{6} - \frac{1}{9} = \\
 & = \frac{3}{18} \cdot \frac{1}{3} + \frac{5}{6} - \frac{1}{9} = \\
 & = \frac{1}{18} + \frac{5}{6} - \frac{1}{9} = \\
 & = \frac{1+15-2}{18} = \\
 & = \frac{14}{18} = \frac{7}{9}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\frac{13}{5} : \left(2 + \frac{5}{4} \right) - \left(1 - \frac{1}{2} \right) \right] : \frac{4}{5} + \left(1 - \frac{1}{6} \right) - \left(1 - \frac{2}{3} \right) = \\
 & = \left[\frac{13}{4} : \left(\frac{8+5}{4} \right) - \left(\frac{2-1}{2} \right) \right] : \frac{4}{5} + \left(\frac{6-1}{6} \right) - \left(\frac{3-2}{3} \right) = \\
 & = \left[\frac{13}{5} : \frac{13}{4} - \frac{1}{2} \right] : \frac{4}{5} + \frac{5}{6} - \frac{1}{3} = \\
 & = \left[\frac{13}{5} \cdot \frac{4}{13} - \frac{1}{2} \right] : \frac{4}{5} + \frac{5}{6} - \frac{1}{3} = \\
 & = \left[\frac{4}{5} - \frac{1}{2} \right] : \frac{4}{5} + \frac{5}{6} - \frac{1}{3} = \\
 & = \frac{8-5}{10} : \frac{4}{5} + \frac{5}{6} - \frac{1}{3} = \\
 & = \frac{3}{8} + \frac{5}{6} - \frac{1}{3} = \\
 & = \frac{9+20-8}{24} = \frac{21}{24} = \frac{7}{8}
 \end{aligned}$$

$$\begin{aligned}
 & \left\{ \left[\left(\frac{4}{5} - \frac{1}{6} \right) : \left(\frac{19}{6} \cdot \frac{12}{3} \right) \right] : \frac{3}{10} + 1 \right\} : \frac{7}{6} - \frac{1}{3} = \\
 & = \left\{ \left[\left(\frac{24}{30} - \frac{5}{30} \right) : \frac{38}{3} \right] \cdot \frac{10}{3} + 1 \right\} : \frac{7}{6} - \frac{1}{3} = \\
 & = \left\{ \left[\left(\frac{19}{30} \cdot \frac{3}{38} \right) \cdot \frac{10}{3} + 1 \right] : \frac{7}{6} - \frac{1}{3} = \right. \\
 & = \left\{ \frac{1}{20} \cdot \frac{10}{3} + 1 \right\} : \frac{7}{6} - \frac{1}{3} = \\
 & = \left\{ \frac{1}{6} + 1 \right\} \cdot \frac{6}{7} - \frac{1}{3} = \\
 & = \left\{ \frac{1+6}{6} \right\} \cdot \frac{6}{7} - \frac{1}{3} = \\
 & = \frac{7}{6} \cdot \frac{6}{7} - \frac{1}{3} = \\
 & = 1 - \frac{1}{3} = \frac{2}{3}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(1 - \frac{2}{3}\right) \cdot \frac{5}{6} \cdot \left(1 - \frac{2}{3}\right) + \frac{1}{3} : 3 \right] \cdot \frac{1}{3} + \frac{5}{6} - \left(1 - \frac{8}{9}\right) = \\
 & = \left[\left(\frac{3-2}{3}\right) \cdot \frac{5}{6} \cdot \left(\frac{3-2}{3}\right) + \frac{1}{3} \cdot \frac{1}{3} \right] \cdot \frac{1}{3} + \frac{5}{6} - \left(\frac{9-8}{9}\right) = \\
 & = \left[\frac{1}{3} \cdot \frac{5}{6} \cdot \frac{1}{3} + \frac{1}{9} \right] \cdot \frac{1}{3} + \frac{5}{6} - \frac{1}{9} = \\
 & = \left[\frac{1}{18} + \frac{1}{9} \right] \cdot \frac{1}{3} + \frac{5}{6} - \frac{1}{9} = \\
 & = \left[\frac{1+2}{18} \right] \cdot \frac{1}{3} + \frac{5}{6} - \frac{1}{9} = \\
 & = \frac{3}{18} \cdot \frac{1}{3} + \frac{5}{6} - \frac{1}{9} = \\
 & = \frac{1}{18} + \frac{5}{6} - \frac{1}{9} = \\
 & = \frac{1+15-2}{18} = \\
 & = \frac{14}{18} = \frac{7}{9}
 \end{aligned}$$

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

$$\begin{aligned}
 & \left\{ \left[\left(1 + \frac{1}{2} : 2 - \frac{1}{2} \right) + \left(\frac{1}{3} : \frac{1}{3} + \frac{1}{2} \cdot \frac{1}{3} \right) \right] - \left(1 : \frac{3}{5} - \frac{1}{2} + 1 \right) \right\} : \frac{3}{4} = \\
 & = \left\{ \left[\left(1 + \frac{1}{4} - \frac{1}{2} \right) + \left(1 + \frac{1}{6} \right) \right] - \left(\frac{5}{3} - \frac{1}{2} + 1 \right) \right\} \cdot \frac{4}{3} = \\
 & = \left\{ \left[\left(\frac{4+1-2}{4} \right) + \left(\frac{6+1}{6} \right) \right] - \left(\frac{10-3+6}{6} \right) \right\} \cdot \frac{4}{3} = \\
 & = \left\{ \left[\frac{3}{4} + \frac{7}{6} \right] - \frac{7}{6} \right\} \cdot \frac{4}{3} = \\
 & = \left\{ \frac{9+14}{12} - \frac{7}{6} \right\} \cdot \frac{4}{3} = \\
 & = \left\{ \frac{23}{12} - \frac{7}{6} \right\} \cdot \frac{4}{3} = \\
 & = \frac{23-14}{12} \cdot \frac{4}{3} = \\
 & = \frac{9}{12} \cdot \frac{4}{3} = \frac{3}{4} \cdot \frac{4}{3} = 1
 \end{aligned}$$

$$\begin{aligned}
 & \left[\frac{1}{2} - \left(1 - \frac{1}{3} \right) : \frac{5}{6} \right] \cdot \left[\left(1 + \frac{3}{4} \right) - \left(1 - \frac{3}{4} \right) : \left(1 + \frac{3}{4} \right) - 1 \right] : \frac{17}{14} = \\
 & = \left[\frac{1}{2} - \frac{2}{3} : \frac{5}{6} \right] \cdot \left[\frac{7}{4} - \frac{1}{4} : \frac{7}{4} - 1 \right] \cdot \frac{14}{17} = \\
 & = \left[\frac{1}{2} - \frac{2}{3} \cdot \frac{6}{5} \right] \cdot \left[\frac{7}{4} - \frac{1}{4} \cdot \frac{4}{7} - 1 \right] \cdot \frac{14}{17} = \\
 & = \left[\frac{1}{2} - \frac{4}{5} \right] \cdot \left[\frac{7}{4} - \frac{1}{7} - 1 \right] \cdot \frac{14}{17} = \\
 & = \frac{5-8}{10} \cdot \left[\frac{49-4-28}{28} \right] \cdot \frac{14}{17} = \\
 & = \frac{3}{10} \cdot \frac{17}{28} \cdot \frac{14}{17} = \frac{3}{20}
 \end{aligned}$$

$$\begin{aligned}
 & \left[\left(1 + \frac{1}{2} \right) + \left(1 - \frac{1}{3} \right) : \left(1 - \frac{2}{3} \right) \right] \cdot \left[\left(1 + \frac{1}{5} \right) : \left(1 - \frac{2}{6} \right) - \left(1 - \frac{1}{4} \right) : \left(1 + \frac{1}{4} \right) \right] : \left(1 + \frac{1}{6} \right) = \\
 & = \left[\frac{3}{2} + \frac{2}{3} : \frac{1}{3} \right] \cdot \left[\frac{6}{5} : \frac{4}{6} - \frac{3}{4} : \frac{5}{4} \right] : \frac{7}{6} = \\
 & = \left[\frac{3}{2} + 2 \right] \cdot \left[\frac{9}{5} - \frac{3}{5} \right] : \frac{7}{6} = \\
 & = \left[\frac{3+4}{2} \right] \cdot \left[\frac{9-3}{5} \right] : \frac{7}{6} = \\
 & = \frac{7}{2} \cdot \frac{6}{5} : \frac{7}{6} = \\
 & = \frac{7}{2} \cdot \frac{6}{5} \cdot \frac{6}{7} = \\
 & = \frac{6}{5} \cdot \frac{3}{1} = \frac{18}{5}
 \end{aligned}$$

$$\left[\left(\frac{5}{9} - \frac{1}{6} \right) \cdot \frac{45}{4} - \frac{7}{4} \cdot \frac{7}{4} \right] \cdot \left[\frac{11}{21} + \frac{20}{9} \cdot \left(\frac{6}{7} - \frac{9}{28} \right) \right] =$$

$$\left(\frac{7}{18} \cdot \frac{45}{4} - \frac{49}{16} \right) \cdot \left(\frac{11}{21} + \frac{20}{9} \cdot \frac{19}{28} \right)$$

$$\left(\frac{35}{8} - \frac{49}{16} \right) \cdot \left(\frac{11}{21} + \frac{95}{63} \right)$$


$$\frac{21}{16} \cdot \left(\frac{11}{21} + \frac{95}{63} \right)$$


$$\frac{21}{16} \cdot \frac{128}{63}$$


$$\frac{8}{1}$$


$$3$$


Keywords

 *Matematica, Aritmetica, Frazioni, Espressioni Q, addizione, sottrazione, moltiplicazione, divisione, esercizi con soluzioni*

 *Math, Arithmetic, Fraction expressions, Fraction, Expression, Addition, Subtraction, Multiplication, Division, Fraction expressions solved*

 *Matemática, Aritmética, Fracción, Expresiones, Resta, Sustracción, Suma, Adición, Multiplicación, División*

 *Mathématique, Arithmétique, Fraction, Problèmes avec fractions, Addition, Soustraction, Multiplication, Division*

 *Mathematik, Arithmetik, Bruchrechnung, Bruch, Subtraktion, Addition, Multiplikation, Division*

Arabic: كسْر

Chinese (Simplified): 分数

Chinese (Traditional): 分數

Czech: zlomek

Danish: brøkdel

Dutch: deel, breuk

Estonian: murd(arv)

Finnish: murtoluku

French: fraction

Greek: κλάσμα

Hungarian: hányad, tört(rész)

Icelandic: brot

Indonesian: pecahan

Japanese: 分数

Korean: 분수

Lithuanian: trupmena

Norwegian: brøk(del)

Polish: ułamek

Portuguese (Brazil): fração

Portuguese (Portugal): fracção

Romanian: fracție

Russian: дробь

Slovak: zlomok

Slovenian: ulomek

Swedish: del

Turkish: kesir