

LE ESPRESSIONI CON I NUMERI RAZIONALI (\mathbb{Q})

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Sommario *Il presente documento contiene un certo numero di esercizi svolti a supporto del lettore. Risolverli, costituisce un metodo efficace per imparare ed acquisire le tecniche matematiche necessarie per affrontare lo studio di argomenti successivi.*

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INTRODUZIONE

Gli esercizi proposti nel codesto documento riguardano il seguente argomento:

- *le espressioni con i numeri razionali (\mathbb{Q}).*

Le tracce di alcuni esercizi trovano ispirazione dai seguenti libri:

- *Matematica.verde 1, Bergamini, Trifone, Barozzi - Zanichelli Editore;*
- *Corso di algebra 1, Dodero, Toscani - Ghisetti e Corvi Editori.*

LE ESPRESSIONI CON I NUMERI RAZIONALI (\mathbb{Q})

$$\begin{aligned} & 3 - \frac{2}{4} + \left[\frac{3}{4} + \left(\frac{2}{10} - \frac{6}{10} \right) \right] - 1 = \\ & = 3 - \frac{1}{2} + \left[\frac{3}{4} + \left(\frac{1}{5} - \frac{6}{10} \right) \right] - 1 = \\ & = \frac{6-1}{2} + \left[\frac{3}{4} + \left(\frac{2-6}{10} \right) \right] - 1 = \\ & = \frac{5}{2} + \left[\frac{3}{4} + \left(-\frac{4}{10} \right) \right] - 1 = \\ & = \frac{5}{2} + \left[\frac{3}{4} - \frac{2}{5} \right] - 1 = \\ & = \frac{5}{2} + \left[\frac{15-8}{20} \right] - 1 = \\ & = \frac{5}{2} + \frac{7}{20} - 1 = \\ & = \frac{50+7-20}{20} = \\ & = \frac{57-20}{20} = \frac{37}{20}. \end{aligned} \tag{1}$$

$$\begin{aligned} & -1 + \left[\frac{1}{2} - \left(\frac{2}{6} - \frac{2}{4} - \frac{1}{5} \right) \right] + (2^0 \cdot 2) = \\ & = -1 + \left[\frac{1}{2} - \left(\frac{1}{3} - \frac{2}{4} + -\frac{1}{5} \right) \right] + 2 = \\ & = -1 + \left[\frac{1}{2} - \left(\frac{1}{3} - \frac{1}{2} + -\frac{1}{5} \right) \right] + 2 = \\ & = -1 + \left[\frac{1}{2} - \left(\frac{10-15+6}{30} \right) \right] + 2 = \\ & = -1 + \left[\frac{1}{2} - \left(\frac{-5+6}{30} \right) \right] + 2 = \\ & = -1 + \left[\frac{1}{2} - \left(\frac{1}{30} \right) \right] + 2 = \\ & = -1 + \left[\frac{1}{2} - \frac{1}{30} \right] + 2 = \\ & = -1 + \left[\frac{15-1}{30} \right] + 2 = \\ & = -1 + \frac{14}{30} + 2 = \\ & = -1 + \frac{7}{15} + 2 = \\ & = \frac{-15+7+30}{15} = \\ & = \frac{-8+30}{15} = \frac{22}{15}. \end{aligned} \tag{2}$$

$$\begin{aligned}
& \frac{2}{20} - \frac{3}{5} + \left[\frac{15}{6} - \left(6 - 7 - \frac{2}{10} \right) \right] - \left(\frac{12}{10} + 3 \right) = \\
& = \frac{1}{10} - \frac{3}{5} + \left[\frac{5}{2} - \left(6 - 7 - \frac{2}{10} \right) \right] - \left(\frac{6}{5} + 3 \right) = \\
& = \frac{1}{10} - \frac{3}{5} + \left[\frac{5}{2} - \left(-1 - \frac{1}{5} \right) \right] - \left(\frac{6+15}{5} \right) = \\
& = \frac{1}{10} - \frac{3}{5} + \left[\frac{5}{2} - \left(\frac{-5-1}{5} \right) \right] - \frac{21}{5} = \\
& = \frac{1}{10} - \frac{3}{5} + \left[\frac{5}{2} + \frac{6}{5} \right] - \frac{21}{5} = \\
& = \frac{1}{10} - \frac{3}{5} + \left[\frac{25+12}{10} \right] - \frac{21}{5} = \\
& = \frac{1}{10} - \frac{3}{5} + \frac{37}{10} - \frac{21}{5} = \\
& = \frac{1-6+37-42}{10} = \\
& = \frac{-10}{10} = -1.
\end{aligned} \tag{3}$$

$$\begin{aligned}
& \frac{5}{4} - \frac{6}{9} + \left[7 - 4 + \frac{5}{2} + \frac{3}{36} - \left(2 \cdot 3 - 2 + \frac{1}{6} \right) \right] = \\
& = \frac{5}{4} - \frac{2}{3} + \left[7 - 4 + \frac{5}{2} + \frac{1}{12} - \left(6 - 2 + \frac{1}{6} \right) \right] = \\
& = \frac{5}{4} - \frac{2}{3} + \left[3 + \frac{5}{2} + \frac{1}{12} - \left(4 + \frac{1}{6} \right) \right] = \\
& = \frac{5}{4} - \frac{2}{3} + \left[3 + \frac{5}{2} + \frac{1}{12} - \left(\frac{24+1}{6} \right) \right] = \\
& = \frac{5}{4} - \frac{2}{3} + \left[3 + \frac{5}{2} + \frac{1}{12} - \frac{25}{6} \right] = \\
& = \frac{5}{4} - \frac{2}{3} + 3 + \frac{5}{2} + \frac{1}{12} - \frac{25}{6} = \\
& = \frac{15-8+36+30+1-50}{12} = \frac{24}{12} = 2.
\end{aligned} \tag{4}$$

$$\begin{aligned}
& -\left(6^0 + 2 \right) - \left(\frac{1}{12} + \frac{3}{6} \right) + \left(\frac{10}{4} - \frac{4}{3} \right) - \left[\frac{1}{6} + \left(-\frac{5}{4} - \frac{1}{3} \right) - 4^0 \right] = \\
& = -\left(1 + 2 \right) - \left(\frac{1}{12} + \frac{1}{2} \right) + \left(\frac{5}{2} - \frac{4}{3} \right) - \left[\frac{1}{6} + \left(-\frac{5}{4} - \frac{1}{3} \right) - 1 \right] = \\
& = -3 - \left(\frac{1}{12} + \frac{6}{12} \right) + \left(\frac{15}{6} - \frac{8}{6} \right) - \left[\frac{1}{6} + \left(-\frac{15}{12} - \frac{4}{12} \right) - 1 \right] = \\
& = -3 - \frac{7}{12} + \frac{7}{6} - \left[\frac{1}{6} - \frac{19}{12} - 1 \right] = \\
& = -3 - \frac{7}{12} + \frac{7}{6} - \frac{1}{6} + \frac{19}{12} + 1 = \\
& = \frac{-36-7+14-2+19+12}{12} = \\
& = \frac{-43+43}{12} = \frac{0}{12} = 0.
\end{aligned} \tag{5}$$

$$\begin{aligned}
& \frac{3}{27} - \left(\frac{3}{2} + \frac{5}{6}\right) + \frac{4}{6} + \left[\frac{1}{9} - \left(\frac{1}{2} + \frac{5}{9} - \frac{1}{6}\right) + \frac{10}{6}\right] = \\
& = \frac{1}{9} - \left(\frac{3}{2} + \frac{5}{6}\right) + \frac{2}{3} + \left[\frac{1}{9} - \left(\frac{1}{2} + \frac{5}{9} - \frac{1}{6}\right) + \frac{5}{3}\right] = \\
& = \frac{1}{9} - \left(\frac{9}{6} + \frac{5}{6}\right) + \frac{2}{3} + \left[\frac{1}{9} - \left(\frac{9+10-3}{18} + \frac{5}{3}\right)\right] = \\
& = \frac{1}{9} - \frac{14}{6} + \frac{2}{3} + \left[\frac{1}{9} - \frac{16}{18} + \frac{5}{3}\right] = \\
& = \frac{1}{9} - \frac{7}{3} + \frac{2}{3} + \frac{1}{9} - \frac{8}{9} + \frac{5}{3} = \\
& = \frac{1-21+6+1-8+15}{9} = -\frac{6}{9} = -\frac{2}{3}.
\end{aligned} \tag{6}$$

$$\begin{aligned}
& \left(\frac{1}{2} + \frac{4}{10}\right) - \left(\frac{1}{2} + \frac{1}{3}\right) - \left[\left(-\frac{2}{30} + \frac{5}{6}\right) - \left(\frac{2}{4} + \frac{1}{5}\right)\right] = \\
& = \left(\frac{1}{2} + \frac{2}{5}\right) - \left(\frac{1}{2} + \frac{1}{3}\right) - \left[\left(-\frac{1}{15} + \frac{5}{6}\right) - \left(\frac{1}{2} + \frac{1}{5}\right)\right] = \\
& = \left(\frac{5+4}{10}\right) - \left(\frac{3+2}{6}\right) - \left[\left(\frac{-2+25}{30}\right) - \left(\frac{5+2}{10}\right)\right] = \\
& = \frac{9}{10} - \frac{5}{6} - \left[\frac{23}{30} - \frac{7}{10}\right] = \\
& = \frac{9}{10} - \frac{5}{6} - \frac{23}{30} + \frac{7}{10} = \\
& = \frac{27-25-23+21}{30} = \frac{0}{30} = 0.
\end{aligned} \tag{7}$$

$$\begin{aligned}
& -2 - \frac{22}{60} - \left[1 - \left(1 + \frac{6}{10}\right) - \left(\frac{3}{10} + \frac{1}{2} - \frac{1}{5}\right)\right] - \left(\frac{2}{6} - \frac{1}{2}\right) = \\
& = -2 - \frac{11}{30} - \left[1 - \left(\frac{5}{5} + \frac{3}{5}\right) - \left(\frac{3+5-2}{10}\right)\right] - \left(\frac{2}{6} - \frac{3}{6}\right) = \\
& = -2 - \frac{11}{30} - \left[1 - \frac{8}{5} - \frac{6}{10}\right] + \frac{1}{6} = \\
& = -2 - \frac{11}{30} - 1 + \frac{8}{5} + \frac{3}{5} + \frac{1}{6} = \\
& = \frac{-60-11-30+48+18+5}{30} = -\frac{30}{30} = -1.
\end{aligned} \tag{8}$$

$$\begin{aligned}
& -2 - \left(-1 - \frac{1}{3}\right) + \frac{16}{22} - \left[-\frac{6}{22} - \frac{3}{9} - \left(\frac{4}{5} - \frac{7}{15}\right)\right] = \\
& = -2 - \left(\frac{-3-1}{3}\right) + \frac{8}{11} - \left[-\frac{3}{11} - \frac{1}{3} - \left(\frac{12-7}{15}\right)\right] = \\
& = -2 + \frac{4}{3} + \frac{8}{11} - \left[-\frac{3}{11} - \frac{1}{3} - \frac{5}{15}\right] = \\
& = -2 + \frac{4}{3} + \frac{8}{11} + \frac{3}{11} + \frac{1}{3} + \frac{1}{3} = \\
& = -2 + \frac{6}{3} + \frac{11}{11} = \\
& = -2 + 2 + 1 = 1.
\end{aligned} \tag{9}$$

$$\begin{aligned}
7 \cdot 1 - \left[\left(3 + \frac{1}{5} - \frac{3}{4} - 2 \right) - \left(\frac{2}{5} - 6 + \frac{3}{4} - \frac{1}{2} \right) \right] + \frac{18}{15} - \left(\frac{7}{20} + \frac{1}{20} \right) &= \\
= 7 - \left[\left(\frac{60 + 4 - 15 - 40}{20} \right) - \left(\frac{8 - 120 + 15 - 10}{20} \right) \right] + \frac{6}{5} - \frac{8}{20} &= \\
= 7 - \left[\frac{9}{20} + \frac{107}{20} \right] + \frac{6}{5} - \frac{2}{5} &= (10) \\
= 7 - \frac{116}{20} + \frac{4}{5} &= \\
= \frac{140 - 116 + 16}{20} = \frac{40}{20} = 2. &
\end{aligned}$$

$$\begin{aligned}
\frac{2}{18} - \frac{1}{12} + \left(\frac{1}{8} - \frac{23}{9} \right) - \left[\frac{3}{8} + \left(\frac{1}{3} - \frac{5}{2} \right) - \frac{4}{24} \right] + \frac{8}{18} &= \\
= \frac{1}{9} - \frac{1}{12} + \left(\frac{9 - 184}{72} \right) - \left[\frac{3}{8} + \left(\frac{2}{6} - \frac{15}{6} \right) - \frac{1}{6} \right] + \frac{4}{9} &= \\
= \frac{1}{9} - \frac{1}{12} - \frac{175}{72} - \left[\frac{3}{8} - \frac{13}{6} - \frac{1}{6} \right] + \frac{4}{9} &= \\
= \frac{1}{9} - \frac{1}{12} - \frac{175}{72} - \left[\frac{3}{8} - \frac{14}{6} \right] + \frac{4}{9} &= (11) \\
= \frac{1}{9} - \frac{1}{12} - \frac{175}{72} - \left[\frac{3}{8} - \frac{7}{3} \right] + \frac{4}{9} &= \\
= \frac{1}{9} - \frac{1}{12} - \frac{175}{72} - \frac{3}{8} + \frac{7}{3} + \frac{4}{9} &= \\
= \frac{8 - 6 - 175 - 27 + 168 + 32}{72} = \frac{0}{72} = 0. &
\end{aligned}$$

$$\begin{aligned}
2^2 - \left[2 + \left(1 - \frac{2}{3} \right) - \left(-4 + \frac{1}{5} \right) \right] + \left[7 - \left(6 + \frac{1}{15} \right) - \frac{20}{50} \right] &= \\
= 4 - \left[2 + \left(\frac{3 - 2}{3} \right) - \left(\frac{-20 + 1}{5} \right) \right] + \left[7 - \left(\frac{90 + 1}{15} \right) - \frac{2}{5} \right] &= \\
= 4 - \left[2 + \frac{1}{3} + \frac{19}{5} \right] + \left[7 - \frac{91}{15} - \frac{2}{5} \right] &= (12) \\
= 4 - \left[\frac{30 + 5 + 57}{15} \right] + \left[\frac{105 - 91 - 6}{15} \right] &= \\
= 4 - \frac{92}{15} + \frac{8}{15} = 4 - \frac{84}{15} &= \\
= \frac{60 - 84}{15} = -\frac{24}{15} = -\frac{8}{5}. &
\end{aligned}$$

$$\begin{aligned}
& \left(\frac{1}{2} + \frac{8}{3} - \frac{7}{3}\right) \cdot \left(\frac{5}{2} - \frac{8}{5} - \frac{5}{2}\right) - \frac{8}{3} + \frac{12}{3} = \\
& = \left(\frac{1}{2} + \frac{1}{3}\right) \cdot \left(-\frac{8}{5}\right) + \frac{4}{3} = \\
& = \left(\frac{3+2}{6}\right) \cdot \left(-\frac{8}{5}\right) + \frac{4}{3} = \\
& = \frac{5}{6} \cdot \left(-\frac{8}{5}\right) + \frac{4}{3} = \\
& = -\frac{40}{30} + \frac{4}{3} = \\
& = -\frac{4}{3} + \frac{4}{3} = 0.
\end{aligned} \tag{13}$$

$$\begin{aligned}
& \left[\frac{3}{2} \cdot \frac{10}{9} + \left(\frac{2}{3} - \frac{1}{5}\right) \cdot \frac{9}{6}\right] + \left(\frac{2}{3} - 4 - \frac{1}{30}\right) - (0 \cdot 3) = \\
& = \left[\frac{30}{18} + \left(\frac{10-3}{15}\right) \cdot \frac{3}{2}\right] + \left(\frac{20-120-1}{30}\right) - 0 = \\
& = \left[\frac{30}{18} + \frac{7}{15} \cdot \frac{3}{2}\right] - \frac{101}{30} = \\
& = \left[\frac{5}{3} + \frac{21}{30}\right] - \frac{101}{30} = \\
& = \frac{5}{3} + \frac{7}{10} - \frac{101}{30} = \\
& = \frac{50+21-101}{30} = -\frac{30}{30} = -1.
\end{aligned} \tag{14}$$

$$\begin{aligned}
& \frac{6}{4} \cdot \left(\frac{2}{5} - \frac{1}{3}\right) \cdot \left(\frac{4}{3} - 3\right) + \frac{6}{4} \cdot \frac{1}{3} + 7 = \\
& = \frac{3}{2} \cdot \left(\frac{6-5}{15}\right) \cdot \left(\frac{4-9}{3}\right) + \frac{6}{12} + 7 = \\
& = \frac{3}{2} \cdot \frac{1}{15} \cdot \left(-\frac{5}{3}\right) + \frac{1}{2} + 7 = \\
& = \frac{3}{30} \cdot \left(-\frac{5}{3}\right) + \frac{1}{2} + 7 = \\
& = -\frac{1}{10} \cdot \frac{5}{3} + \frac{1}{2} + 7 = \\
& = -\frac{5}{30} + \frac{1}{2} + 7 = \\
& = -\frac{1}{6} + \frac{1}{2} + 7 = \\
& = \frac{-1+3+42}{6} = \frac{44}{6} = \frac{22}{3}.
\end{aligned} \tag{15}$$

$$\begin{aligned}
& \left[\frac{3}{2} \cdot \frac{20}{18} + \left(\frac{2}{3} - \frac{1}{5} \right) \cdot \frac{12}{8} \right] + \left(\frac{2}{3} - 4 - \frac{1}{30} \right) = \\
& = \left[\frac{60}{36} + \left(\frac{10-3}{15} \right) \cdot \frac{3}{2} \right] + \left(\frac{20-120-1}{30} \right) = \\
& = \left[\frac{5}{3} + \frac{7}{15} \cdot \frac{3}{2} \right] - \frac{101}{30} = \\
& = \left[\frac{5}{3} + \frac{21}{30} \right] - \frac{101}{30} = \\
& = \left[\frac{5}{3} + \frac{7}{10} \right] - \frac{101}{30} = \\
& = \left[\frac{50+21}{30} \right] - \frac{101}{30} = \\
& = \frac{71}{30} - \frac{101}{30} = -\frac{30}{30} = -1.
\end{aligned} \tag{16}$$

$$\begin{aligned}
& \left\{ \left[\frac{9}{12} - \left(\frac{1}{7} - \frac{2}{3} \right) \cdot \left(\frac{12}{11} - 3 \right) \right] \cdot \frac{32}{10} \right\} + \frac{3}{15} = \\
& = \left\{ \left[\frac{3}{4} - \left(\frac{3-14}{21} \right) \cdot \left(\frac{12-33}{11} \right) \right] \cdot \frac{16}{5} \right\} + \frac{1}{5} = \\
& = \left\{ \left[\frac{3}{4} - \frac{11}{21} \cdot \left(\frac{21}{11} \right) \right] \cdot \frac{16}{5} \right\} + \frac{1}{5} = \\
& = \left\{ \left[\frac{3}{4} - 1 \right] \cdot \frac{16}{5} \right\} + \frac{1}{5} = \\
& = \left\{ \left[\frac{3-4}{4} \right] \cdot \frac{16}{5} \right\} + \frac{1}{5} = \\
& = \left\{ -\frac{1}{4} \cdot \frac{16}{5} \right\} + \frac{1}{5} = \\
& = -\frac{16}{20} + \frac{1}{5} = \\
& = -\frac{4}{5} + \frac{1}{5} = -\frac{3}{5}.
\end{aligned} \tag{17}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{1}{7} - \frac{3}{3} \right) \cdot \left(3 + \frac{1}{2} \right) - \left(\frac{4}{3} - \frac{1}{6} \right) \cdot \left(\frac{1}{7} - 4 \right) \right] \cdot \frac{32}{6} \right\} - \left(\frac{1}{12} + \frac{31}{4} \right) = \\
& = \left\{ \left[\left(\frac{1}{7} - 1 \right) \cdot \left(\frac{6+1}{2} \right) - \left(\frac{8-1}{6} \right) \cdot \left(\frac{1-28}{7} \right) \right] \cdot \frac{16}{3} \right\} - \left(\frac{1+93}{12} \right) = \\
& = \left\{ \left[\left(\frac{1-7}{7} \right) \cdot \frac{7}{2} - \frac{7}{6} \cdot \left(-\frac{27}{7} \right) \right] \cdot \frac{16}{3} \right\} - \frac{94}{12} = \\
& = \left\{ \left[\left(-\frac{6}{7} \right) \cdot \frac{7}{2} + \frac{27}{6} \right] \cdot \frac{16}{3} \right\} - \frac{47}{6} = \\
& = \left\{ \left[-3 + \frac{9}{2} \right] \cdot \frac{16}{3} \right\} - \frac{47}{6} = \\
& = \left\{ \left[\frac{-6+9}{2} \right] \cdot \frac{16}{3} \right\} - \frac{47}{6} = \\
& = \left\{ \frac{3}{2} \cdot \frac{16}{3} \right\} - \frac{47}{6} = \\
& = \left\{ 8 \right\} - \frac{47}{6} = \\
& = 8 - \frac{47}{6} = \\
& = \frac{48-47}{6} = \frac{1}{6}.
\end{aligned} \tag{18}$$

$$\begin{aligned}
& \left[\left(\frac{1}{7} - \frac{1}{5} \right) : \left(3 - \frac{1}{7} \right) \right] \cdot \left[\left(\frac{25}{28} \cdot \frac{7}{2} \right) \cdot (8 \cdot 2^0) \right] = \\
& = \left[\left(\frac{5-7}{35} \right) : \left(\frac{21-1}{7} \right) \right] \cdot \left[\left(\frac{25}{4} \cdot \frac{1}{2} \right) \cdot 8 \right] = \\
& = \left[-\frac{2}{35} : \frac{20}{7} \right] \cdot \left[\frac{25}{8} \cdot 8 \right] = \\
& = \left[-\frac{2}{35} \cdot \frac{7}{20} \right] \cdot \left[\frac{25}{8} \cdot 8 \right] = \\
& = \left[-\frac{1}{5} \cdot \frac{1}{10} \right] \cdot 25 = \\
& = \left[-\frac{1}{50} \right] \cdot 25 = \\
& = -\frac{1}{50} \cdot 25 = -\frac{1}{2}.
\end{aligned} \tag{19}$$

$$\begin{aligned}
& \left[\left(\frac{1}{6} - 2^2 \right) : \left(\frac{2}{3} - 2 \right) \right] \cdot \left[\frac{8}{46} : \left(\frac{1}{2} - \frac{2}{5} \right) \right] = \\
& = \left[\left(\frac{1-24}{6} \right) : \left(\frac{2-6}{3} \right) \right] \cdot \left[\frac{4}{23} : \left(\frac{5-4}{10} \right) \right] = \\
& = \left[\left(-\frac{23}{6} \right) : \left(-\frac{4}{3} \right) \right] \cdot \left[\frac{4}{23} : \left(\frac{1}{10} \right) \right] = \\
& = \left[\frac{23}{6} \cdot \frac{3}{4} \right] \cdot \frac{4}{23} \cdot 10 = \\
& = \left[\frac{23}{2} \cdot \frac{1}{4} \right] \cdot \frac{40}{23} = \\
& = \frac{23}{8} \cdot \frac{40}{23} = 5.
\end{aligned} \tag{20}$$

$$\begin{aligned}
& \left[\left(\frac{1}{6} - \frac{2}{5} \right) : \left(\frac{2}{3} - 1 \right) \right] : \left[\left(\frac{1}{10} \cdot \frac{4}{3} \right) \cdot \frac{4}{8} \right] = \\
& = \left[\left(\frac{5-12}{30} \right) : \left(\frac{2-3}{3} \right) \right] : \left[\left(\frac{1}{10} \cdot \frac{4}{3} \right) \cdot \frac{1}{2} \right] = \\
& = \left[\left(-\frac{7}{30} \right) : \left(-\frac{1}{3} \right) \right] : \left[\left(\frac{1}{5} \cdot \frac{2}{3} \right) \cdot \frac{1}{2} \right] = \\
& = \left[\frac{7}{30} \cdot 3 \right] : \left[\frac{2}{15} \cdot \frac{1}{2} \right] = \\
& = \frac{7}{10} : \left[\frac{1}{15} \cdot 1 \right] = \\
& = \frac{7}{10} : \frac{1}{15} = \\
& = \frac{7}{10} \cdot 15 = \frac{7}{2} \cdot 3 = \frac{21}{2}.
\end{aligned} \tag{21}$$

$$\begin{aligned}
& \left[\left(\frac{3}{18} + \frac{2}{4} \right) : \left(\frac{1}{2} - \frac{10}{8} \right) \right] : \left[\frac{4}{9} : \left(\frac{6}{9} - 2 \right) \right] = \\
& = \left[\left(\frac{1}{6} + \frac{2}{4} \right) : \left(\frac{1}{2} - \frac{5}{4} \right) \right] : \left[\frac{4}{9} : \left(\frac{2}{3} - 2 \right) \right] = \\
& = \left[\left(\frac{1}{6} + \frac{1}{2} \right) : \left(\frac{2-5}{4} \right) \right] : \left[\frac{4}{9} : \left(\frac{2-6}{3} \right) \right] = \\
& = \left[\left(\frac{1+3}{6} \right) : \left(-\frac{3}{4} \right) \right] : \left[\frac{4}{9} : \left(-\frac{4}{3} \right) \right] = \\
& = \left[\left(\frac{4}{6} \right) : \left(-\frac{3}{4} \right) \right] : \left[\frac{4}{9} \cdot \left(-\frac{3}{4} \right) \right] = \\
& = \left[\left(\frac{2}{3} \right) \cdot \left(-\frac{4}{3} \right) \right] : \left[-\frac{1}{3} \right] = \\
& = \left[-\frac{8}{9} \right] : \left[-\frac{1}{3} \right] = \\
& = \frac{8}{9} \cdot 3 = \frac{8}{3}.
\end{aligned} \tag{22}$$

$$\begin{aligned}
& \left[\left(\frac{4}{10} - \frac{1}{2} \right) : \left(\frac{1}{6} - \frac{4}{6} \right) \right] \cdot \left[\left(\frac{1}{6} : \frac{1}{3} \right) : \left(-\frac{12}{8} \right) \right] = \\
& = \left[\left(\frac{2}{5} - \frac{1}{2} \right) : \left(\frac{1}{6} - \frac{2}{3} \right) \right] \cdot \left[\left(\frac{1}{6} : \frac{1}{3} \right) : \left(-\frac{3}{2} \right) \right] = \\
& = \left[\left(\frac{4-5}{10} \right) : \left(\frac{1-4}{6} \right) \right] \cdot \left[\left(\frac{1}{6} \cdot 3 \right) \cdot \left(-\frac{2}{3} \right) \right] = \\
& = \left[-\frac{1}{10} : \left(-\frac{3}{6} \right) \right] \cdot \left[\frac{1}{2} \cdot \left(-\frac{2}{3} \right) \right] = \\
& = \left[-\frac{1}{10} \cdot \left(-\frac{6}{3} \right) \right] \cdot \left[-\frac{1}{3} \right] = \\
& = \left[\frac{1}{10} \cdot 2 \right] \cdot \left[-\frac{1}{3} \right] = \\
& = \frac{1}{5} \cdot \left[-\frac{1}{3} \right] = -\frac{1}{15}.
\end{aligned} \tag{23}$$

$$\begin{aligned}
& \frac{2}{5} + \frac{1}{3} - \left[\frac{4}{3} - \left(\frac{1}{5} - \frac{2}{15} \right) + \frac{7}{21} \right] - \frac{8}{6} \cdot \left[\frac{1}{4} - \left(\frac{1}{3} + 1 \right) \right] : \frac{13}{5} - \frac{4}{5} = \\
& = \frac{6+5}{15} - \left[\frac{4}{3} - \left(\frac{3-2}{15} \right) + \frac{1}{3} \right] - \frac{4}{3} \cdot \left[\frac{1}{4} - \left(\frac{1+3}{3} \right) \right] : \frac{13}{5} - \frac{4}{5} = \\
& = \frac{11}{15} - \left[\frac{4}{3} - \frac{1}{15} + \frac{1}{3} \right] - \frac{4}{3} \cdot \left[\frac{1}{4} - \frac{4}{3} \right] : \frac{13}{5} - \frac{4}{5} = \\
& = \frac{11}{15} - \left[\frac{5}{3} - \frac{1}{15} \right] - \frac{4}{3} \cdot \left[\frac{3-16}{12} \right] : \frac{13}{5} - \frac{4}{5} = \\
& = \frac{11}{15} - \frac{5}{3} + \frac{1}{15} - \frac{4}{3} \cdot \left[-\frac{13}{12} \right] : \frac{13}{5} - \frac{4}{5} = \\
& = \frac{12}{15} - \frac{5}{3} + \frac{13}{9} : \frac{13}{5} - \frac{4}{5} = \\
& = \frac{12}{15} - \frac{5}{3} + \frac{13}{9} \cdot \frac{5}{13} - \frac{4}{5} = \\
& = \frac{12}{15} - \frac{5}{3} + \frac{5}{9} - \frac{4}{5} = \\
& = \frac{36-75+25-36}{45} = -\frac{50}{45} = -\frac{10}{9}.
\end{aligned} \tag{24}$$

$$\begin{aligned}
& \frac{3}{6} + \frac{4}{3} - \left[\frac{4}{8} + \frac{10}{15} + \left(4^0 + \frac{1}{4} \right) \cdot \frac{12}{5} \right] \cdot \frac{1}{3} + \left(\frac{1}{9} : \frac{3}{4} \right) - \frac{1}{27} = \\
& = \frac{1}{2} + \frac{4}{3} - \left[\frac{1}{2} + \frac{2}{3} + \left(1 + \frac{1}{4} \right) \cdot \frac{12}{5} \right] \cdot \frac{1}{3} + \left(\frac{1}{9} : \frac{3}{4} \right) - \frac{1}{27} = \\
& = \frac{3+8}{6} - \left[\frac{3+4}{6} + \left(\frac{4+1}{4} \right) \cdot \frac{12}{5} \right] \cdot \frac{1}{3} + \left(\frac{1}{9} \cdot \frac{4}{3} \right) - \frac{1}{27} = \\
& = \frac{11}{6} - \left[\frac{7}{6} + \frac{5}{4} \cdot \frac{12}{5} \right] \cdot \frac{1}{3} + \frac{4}{27} - \frac{1}{27} = \\
& = \frac{11}{6} - \left[\frac{7}{6} + 3 \right] \cdot \frac{1}{3} + \frac{3}{27} = \\
& = \frac{11}{6} - \left[\frac{7+18}{6} \right] \cdot \frac{1}{3} + \frac{1}{9} = \\
& = \frac{11}{6} - \left[\frac{25}{6} \right] \cdot \frac{1}{3} + \frac{1}{9} = \\
& = \frac{11}{6} - \frac{25}{18} + \frac{1}{9} = \\
& = \frac{99-75+6}{54} = \frac{30}{54} = \frac{5}{9}.
\end{aligned} \tag{25}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{1}{3} - \frac{4}{7} \right) : \left(\frac{2}{7} - \frac{1}{2} \right) \cdot \frac{3}{5} - \frac{2}{3} \right] \cdot \frac{1}{2} \right\} \cdot \frac{1}{4} - \frac{4}{6} + 5^0 = \\
& = \left\{ \left[\left(\frac{7-12}{21} \right) : \left(\frac{4-7}{14} \right) \cdot \frac{3}{5} - \frac{2}{3} \right] \cdot \frac{1}{2} \right\} \cdot \frac{1}{4} + \frac{-4+6}{6} = \\
& = \left\{ \left[\left(-\frac{5}{21} \right) : \left(-\frac{3}{14} \right) \cdot \frac{3}{5} - \frac{2}{3} \right] \cdot \frac{1}{2} \right\} \cdot \frac{1}{4} + \frac{2}{6} = \\
& = \left\{ \left[\frac{5}{21} \cdot \frac{14}{3} \cdot \frac{3}{5} - \frac{2}{3} \right] \cdot \frac{1}{2} \right\} \cdot \frac{1}{4} + \frac{1}{3} = \\
& = \left\{ \left[\frac{14}{21} - \frac{2}{3} \right] \cdot \frac{1}{2} \right\} \cdot \frac{1}{4} + \frac{1}{3} = \\
& = \left\{ 0 \cdot \frac{1}{2} \right\} \cdot \frac{1}{4} + \frac{1}{3} = \\
& = 0 \cdot \frac{1}{4} + \frac{1}{3} = 0 + \frac{1}{3} = \frac{1}{3}.
\end{aligned} \tag{26}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{2}{3} - \frac{3}{18} \right) \cdot \frac{12}{8} - \frac{1}{4} \right] - \frac{1}{5} \cdot \left[(3 \cdot 5) \cdot \left(2 - \frac{1}{3} \right) - \frac{5}{3} \right] \right\} + \frac{1}{4} - \frac{2}{3} + 4 = \\
& = \left\{ \left[\left(\frac{2}{3} - \frac{1}{6} \right) \cdot \frac{3}{2} - \frac{1}{4} \right] - \frac{1}{5} \cdot \left[15 \cdot \left(2 - \frac{1}{3} \right) - \frac{5}{3} \right] \right\} + \frac{1}{4} - \frac{2}{3} + 4 = \\
& = \left\{ \left[\left(\frac{4-1}{6} \right) \cdot \frac{3}{2} - \frac{1}{4} \right] - \frac{1}{5} \cdot \left[15 \cdot \left(\frac{6-1}{3} \right) - \frac{5}{3} \right] \right\} + \frac{3-8+48}{12} = \\
& = \left\{ \left[\left(\frac{3}{6} \right) \cdot \frac{3}{2} - \frac{1}{4} \right] - \frac{1}{5} \cdot \left[15 \cdot \frac{5}{3} - \frac{5}{3} \right] \right\} + \frac{43}{12} = \\
& = \left\{ \left[\frac{1}{2} \cdot \frac{3}{2} - \frac{1}{4} \right] - \frac{1}{5} \cdot \left[25 - \frac{5}{3} \right] \right\} + \frac{43}{12} = \\
& = \left\{ \left[\frac{3}{4} - \frac{1}{4} \right] - \frac{1}{5} \cdot \left[\frac{75-5}{3} \right] \right\} + \frac{43}{12} = \\
& = \left\{ \frac{1}{2} - \frac{1}{5} \cdot \frac{70}{3} \right\} + \frac{43}{12} = \\
& = \left\{ \frac{1}{2} - \frac{14}{3} \right\} + \frac{43}{12} = \\
& = \left\{ \frac{3-28}{6} \right\} + \frac{43}{12} = \\
& = \left\{ -\frac{25}{6} \right\} + \frac{43}{12} = \\
& = -\frac{25}{6} + \frac{43}{12} = \frac{-50+43}{12} = -\frac{7}{12}.
\end{aligned} \tag{27}$$

$$\begin{aligned}
& \left\{ \left[-\frac{1}{5} \cdot \left(\frac{3}{2} + 3^0 \right) + \frac{6}{4} \right] : \frac{5}{4} + \left(3 - \frac{2}{3} \right) \cdot \left(-\frac{1}{5} - \frac{2}{7} \right) \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
= & \left\{ \left[-\frac{1}{5} \cdot \left(\frac{3+2}{2} \right) + \frac{3}{2} \right] \cdot \frac{4}{5} + \left(\frac{9-2}{3} \right) \cdot \left(\frac{-7-10}{35} \right) \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
& = \left\{ \left[-\frac{1}{5} \cdot \frac{5}{2} + \frac{3}{2} \right] \cdot \frac{4}{5} + \frac{7}{3} \cdot \left(-\frac{17}{35} \right) \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
& = \left\{ \left[-\frac{1}{2} + \frac{3}{2} \right] \cdot \frac{4}{5} - \frac{17}{15} \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
& = \left\{ 1 \cdot \frac{4}{5} - \frac{17}{15} \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
& = \left\{ \frac{4}{5} - \frac{17}{15} \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
& = \left\{ \frac{12-17}{15} \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
& = \left\{ -\frac{5}{15} \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
& = \left\{ -\frac{1}{3} \right\} \cdot \frac{3}{4} - \frac{1}{12} = \\
& = -\frac{1}{4} - \frac{1}{12} = \frac{-3-1}{12} = -\frac{4}{12} = -\frac{1}{3}.
\end{aligned} \tag{28}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{5}{30} - \frac{2}{16} \right) : \left(\frac{1}{2} - \frac{3}{9} \right) + \frac{4}{6} \right] \cdot 6 - \frac{1}{4} \right\} \cdot 2 - \frac{1}{5} + \left(\frac{1}{10} - \frac{27}{5} \right) = \\
= & \left\{ \left[\left(\frac{1}{6} - \frac{1}{8} \right) : \left(\frac{1}{2} - \frac{1}{3} \right) + \frac{2}{3} \right] \cdot 6 - \frac{1}{4} \right\} \cdot 2 - \frac{1}{5} + \left(\frac{1}{10} - \frac{27}{5} \right) = \\
= & \left\{ \left[\left(\frac{4-3}{24} \right) : \left(\frac{3-2}{6} \right) + \frac{2}{3} \right] \cdot 6 - \frac{1}{4} \right\} \cdot 2 - \frac{1}{5} + \left(\frac{1-54}{10} \right) = \\
& = \left\{ \left[\frac{1}{24} : \left(\frac{1}{6} \right) + \frac{2}{3} \right] \cdot 6 - \frac{1}{4} \right\} \cdot 2 - \frac{1}{5} - \left(\frac{53}{10} \right) = \\
& = \left\{ \left[\frac{1}{24} \cdot 6 + \frac{2}{3} \right] \cdot 6 - \frac{1}{4} \right\} \cdot 2 - \frac{1}{5} - \frac{53}{10} = \\
& = \left\{ \left[\frac{1}{4} + \frac{2}{3} \right] \cdot 6 - \frac{1}{4} \right\} \cdot 2 + \frac{-2-53}{10} = \\
& = \left\{ \left[\frac{3+8}{12} \right] \cdot 6 - \frac{1}{4} \right\} \cdot 2 - \frac{55}{10} = \\
& = \left\{ \left[\frac{11}{12} \right] \cdot 6 - \frac{1}{4} \right\} \cdot 2 - \frac{55}{10} = \\
& = \left\{ \frac{11}{2} - \frac{1}{4} \right\} \cdot 2 - \frac{55}{10} = \\
& = \left\{ \frac{22-1}{4} \right\} \cdot 2 - \frac{55}{10} = \\
& = \frac{21}{4} \cdot 2 - \frac{55}{10} = \\
& = \frac{21}{2} - \frac{55}{10} = \frac{105-55}{10} = \frac{50}{10} = 5.
\end{aligned} \tag{29}$$

$$\begin{aligned}
& \frac{2}{3} - \frac{1}{6} + \left[\frac{4}{8} - \frac{1}{3} - \left(4^0 + \frac{4}{5} \right) : \frac{1}{5} \right] - \left[\frac{3}{21} + \frac{4}{6} - \left(\frac{1}{14} + 1^0 \right) \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{2}{3} - \frac{1}{6} + \left[\frac{2}{4} - \frac{1}{3} - \left(1 + \frac{4}{5} \right) : \frac{1}{5} \right] - \left[\frac{1}{7} + \frac{2}{3} - \left(\frac{1}{14} + 1 \right) \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{4-1}{6} + \left[\frac{1}{2} - \frac{1}{3} - \left(\frac{5+4}{5} \right) \cdot 5 \right] - \left[\frac{1}{7} + \frac{2}{3} - \left(\frac{1+14}{14} \right) \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{3}{6} + \left[\frac{1}{2} - \frac{1}{3} - \frac{9}{5} \cdot 5 \right] - \left[\frac{1}{7} + \frac{2}{3} - \frac{15}{14} \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{1}{2} + \left[\frac{1}{2} - \frac{1}{3} - 9 \right] - \left[\frac{6+28-45}{42} \right] \cdot \frac{7}{11} + 8 = \tag{30} \\
& = \frac{1}{2} + \left[\frac{3-2-54}{6} \right] - \left[-\frac{11}{42} \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{1}{2} + \left[-\frac{53}{6} \right] + \frac{7}{42} \cdot \frac{1}{11} + 8 = \\
& = \frac{1}{2} - \frac{53}{6} + \frac{7}{42} + 8 = \\
& = \frac{21 - 371 + 7 + 336}{42} = -\frac{7}{42} = -\frac{1}{6}.
\end{aligned}$$

$$\begin{aligned}
& \left[\left(\frac{1}{3} - \frac{8}{10} \right) \cdot \frac{3}{7} - \left(\frac{3}{9} + \frac{2}{5} \right) \right] + \left[\frac{4}{3} - \frac{1}{4} + \left(-\frac{1}{3} \right) \right] \cdot \frac{20}{3} + \frac{9}{15} = \\
& = \left[\left(\frac{1}{3} - \frac{4}{5} \right) \cdot \frac{3}{7} - \left(\frac{1}{3} + \frac{2}{5} \right) \right] + \left[\frac{4}{3} - \frac{1}{4} + \left(-\frac{1}{3} \right) \right] \cdot \frac{20}{3} + \frac{9}{15} = \\
& = \left[\left(\frac{5-12}{15} \right) \cdot \frac{3}{7} - \left(\frac{5+6}{15} \right) \right] + \left[\frac{4}{3} - \frac{1}{4} - \frac{1}{3} \right] \cdot \frac{20}{3} + \frac{9}{15} = \\
& = \left[\left(-\frac{7}{15} \right) \cdot \frac{3}{7} - \frac{11}{15} \right] + \left[\frac{3}{3} - \frac{1}{4} \right] \cdot \frac{20}{3} + \frac{9}{15} = \\
& = \left[-\frac{1}{5} - \frac{11}{15} \right] + \left[1 - \frac{1}{4} \right] \cdot \frac{20}{3} + \frac{9}{15} = \tag{31} \\
& = \left[\frac{-3-11}{15} \right] + \left[\frac{4-1}{4} \right] \cdot \frac{20}{3} + \frac{9}{15} = \\
& = -\frac{14}{15} + \frac{3}{4} \cdot \frac{20}{3} + \frac{9}{15} = \\
& = -\frac{5}{15} + 5 + = \\
& = -\frac{1}{3} + 5 = \\
& = \frac{-1+15}{3} = \frac{14}{3}.
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[\left(3 - \frac{26}{22} \right) : \left(\frac{6}{4} - \frac{4}{11} \right) \right] - \frac{6}{1} \right\} \cdot \frac{8}{3} - \left(\frac{4}{3} : \frac{1}{3} - 2^2 + \frac{16}{5} \right) = \\
& = \left\{ \left[\left(3 - \frac{13}{11} \right) : \left(\frac{3}{2} - \frac{4}{11} \right) \right] - \frac{3}{5} \right\} \cdot \frac{8}{3} - \left(\frac{4}{3} : \frac{1}{3} - 4 + \frac{16}{5} \right) = \\
& = \left\{ \left[\left(\frac{33-13}{11} \right) : \left(\frac{33-8}{22} \right) \right] - \frac{3}{5} \right\} \cdot \frac{8}{3} - \left(\frac{4}{3} \cdot 3 - 4 + \frac{16}{5} \right) = \\
& = \left\{ \left[\frac{20}{11} : \frac{25}{22} \right] - \frac{3}{5} \right\} \cdot \frac{8}{3} - \left(4 - 4 + \frac{16}{5} \right) = \\
& = \left\{ \left[\frac{20}{11} \cdot \frac{22}{25} \right] - \frac{3}{5} \right\} \cdot \frac{8}{3} - \frac{16}{5} = \tag{32} \\
& = \left\{ \frac{8}{5} - \frac{3}{5} \right\} \cdot \frac{8}{3} - \frac{16}{5} = \\
& = \frac{5}{5} \cdot \frac{8}{3} - \frac{16}{5} = \\
& = 1 \cdot \frac{8}{3} - \frac{16}{5} = \\
& = \frac{8}{3} - \frac{16}{5} = \frac{40-48}{15} = -\frac{8}{15}.
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{8}{6} - \frac{2}{8} \right) \cdot \left(-\frac{2}{13} + 3 \right) - \frac{15}{6} \right] \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \left[\left(\frac{4}{3} - \frac{1}{4} \right) \cdot \left(-\frac{2}{13} + 3 \right) - \frac{30}{12} \right] \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \left[\left(\frac{16-3}{12} \right) \cdot \left(\frac{-2+39}{13} \right) - \frac{5}{2} \right] \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \left[\frac{13}{12} \cdot \frac{37}{13} - \frac{5}{2} \right] \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \left[\frac{37}{12} - \frac{5}{2} \right] \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \left[\frac{37-30}{12} \right] \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \tag{33} \\
& = \left\{ \left[\frac{7}{12} \right] \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \frac{7}{12} \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \frac{1}{3} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ -\frac{1}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = -\frac{1}{5} - \frac{2}{5} + 1 = -\frac{3}{5} + 1 = \frac{-3+5}{5} = \frac{2}{5}.
\end{aligned}$$

$$\begin{aligned}
& \frac{\left(7^0 - \frac{1}{2}\right) : \left(-\frac{9}{12}\right) + \left(\frac{2}{8} - \frac{1}{5}\right) \cdot (-60)}{4 \cdot 1 - \frac{2}{3} + \left(\frac{1}{2} - 5\right) : \left(-\frac{27}{10}\right)} = \\
& = \frac{\left(1 - \frac{1}{2}\right) : \left(-\frac{3}{4}\right) + \left(\frac{1}{4} - \frac{1}{5}\right) \cdot (-60)}{4 - \frac{2}{3} + \left(\frac{1}{2} - 5\right) : \left(-\frac{27}{10}\right)} = \\
& = \frac{\left(\frac{2-1}{2}\right) \cdot \left(-\frac{4}{3}\right) + \left(\frac{5-4}{20}\right) \cdot (-60)}{\frac{12-2}{3} + \left(\frac{1-10}{2}\right) \cdot \left(-\frac{10}{27}\right)} = \\
& = \frac{\frac{1}{2} \cdot \left(-\frac{4}{3}\right) + \frac{1}{20} \cdot (-60)}{\frac{10}{3} + \left(-\frac{9}{2}\right) \cdot \left(-\frac{10}{27}\right)} = \\
& = -\frac{\frac{2}{3}}{\frac{10}{3}} - \frac{3}{5} = -\frac{2}{3} \cdot \frac{3}{10} - 3 \cdot \frac{3}{5} = -\frac{1}{5} - \frac{9}{5} = -\frac{10}{5} = -2.
\end{aligned}$$

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$$\begin{aligned}
& \frac{\frac{3}{7} \cdot \left(-\frac{4}{5} + \frac{3}{6}\right) \cdot \left(\frac{5}{9} - 4^0\right)}{\frac{1}{14} - \left(\frac{2}{7} - \frac{1}{4}\right)} = \\
& = \frac{\frac{3}{7} \cdot \left(-\frac{4}{5} + \frac{1}{2}\right) \cdot \left(\frac{5}{9} - 1\right)}{\frac{1}{14} - \left(\frac{2}{7} - \frac{1}{4}\right)} = \\
& = \frac{\frac{3}{7} \cdot \left(\frac{-8+5}{10}\right) \cdot \left(\frac{5-9}{9}\right)}{\frac{1}{14} - \left(\frac{8-7}{28}\right)} = \frac{\frac{3}{7} \cdot \left(-\frac{3}{10}\right) \cdot \left(-\frac{4}{9}\right)}{\frac{1}{14} - \frac{1}{28}} = \\
& = -\frac{\frac{9}{70}}{\frac{2-1}{28}} \cdot \left(-\frac{4}{9}\right) = -\frac{\frac{9}{70}}{1} \cdot \left(-\frac{4}{9}\right) = \\
& = -\frac{9}{70} \cdot 28 \cdot \left(-\frac{4}{9}\right) = \frac{112}{70} = \frac{8}{5}.
\end{aligned}$$

(35)

$$\begin{aligned}
& -\left(-\frac{2}{6} + \frac{2}{5}\right) + \frac{5}{6} + \left(-\frac{1}{3}\right) = \\
& -\frac{6}{10} - \left(-\frac{2}{3}\right) - \frac{9}{12} + \frac{10}{24} = \\
& = \frac{-\left(-\frac{1}{3} + \frac{2}{5}\right) + \frac{5}{6} + \left(-\frac{1}{3}\right)}{-\frac{3}{5} - \left(-\frac{2}{3}\right) - \frac{3}{4} + \frac{5}{12}} = \\
& = \frac{-\left(\frac{-5+6}{15}\right) + \frac{5}{6} - \frac{1}{3}}{\frac{3}{5} + \frac{2}{3} - \frac{9+5}{12}} = \frac{-\frac{1}{15} + \frac{5-2}{6}}{-\frac{9+10}{15} + \frac{4}{12}} = \\
& = \frac{-\frac{1}{15} + \frac{3}{6}}{\frac{1}{15} - \frac{1}{3}} = -1 + \frac{\frac{1}{2}}{\frac{1}{15} - \frac{1}{3}} = -1 + \frac{1}{2} \cdot (-3) = \\
& = -1 - \frac{3}{2} = \frac{-2-3}{2} = -\frac{5}{2}.
\end{aligned} \tag{36}$$

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

(37)

$$\begin{aligned}
& \frac{\left(\frac{1}{7}-5^0\right) \cdot \left(-\frac{2}{3}+\frac{10}{8}\right)}{-\frac{11}{12}+\frac{6}{9} \cdot \frac{7}{4}} + \frac{\frac{2}{3}-\frac{3}{4}}{\frac{3}{2}+\frac{4}{9}} : \frac{\frac{1}{10}-\frac{2}{21}}{3^0-\frac{7}{9}} = \\
& = \frac{\left(\frac{1}{7}-1\right) \cdot \left(-\frac{2}{3}+\frac{5}{4}\right)}{-\frac{11}{12}+\frac{2}{3} \cdot \frac{7}{4}} + \frac{\frac{2}{3}-\frac{3}{4}}{\frac{3}{2}+\frac{4}{9}} : \frac{\frac{1}{10}-\frac{2}{21}}{1-\frac{7}{9}} = \\
& = \frac{\left(\frac{1-7}{7}\right) \cdot \left(\frac{-8+15}{12}\right)}{-\frac{11}{12}+\frac{1}{3} \cdot \frac{7}{2}} + \frac{\frac{8-9}{12}}{\frac{27+8}{18}} : \frac{\frac{21-20}{9-7}}{\frac{210}{9}} = \quad (38) \\
& = \frac{\left(-\frac{6}{7}\right) \cdot \left(\frac{7}{12}\right)}{-\frac{11}{12}+\frac{7}{6}} + \frac{-\frac{1}{12}}{\frac{35}{18}} : \frac{\frac{1}{2}}{\frac{210}{9}} = \frac{-\frac{1}{2}}{-11+14} - \frac{1}{12} \cdot \frac{18}{35} : \frac{1}{210} \cdot \frac{9}{2} = \\
& = \frac{-\frac{1}{2}}{\frac{3}{12}} - \frac{3}{70} : \frac{3}{140} = -\frac{1}{2} \cdot 4 - \frac{3}{70} \cdot \frac{140}{3} = -2 - 2 = -4.
\end{aligned}$$

$$\begin{aligned}
& \left[\left(-\frac{3}{12}\right)^3 : \left(-\frac{2}{8}\right)\right]^2 = \\
& = \left[\left(-\frac{1}{4}\right)^3 : \left(-\frac{1}{4}\right)\right]^2 = \quad (39) \\
& = \left[\frac{1^2}{4}\right]^2 = \left[\frac{1}{4}\right]^4 = \frac{1}{256}.
\end{aligned}$$

$$\begin{aligned}
& \left[\left(\frac{4}{6}\right)^2 \cdot \left(\frac{6}{16}\right)^2\right]^2 \cdot 2^4 = \\
& = \left[\left(\frac{2}{3}\right)^2 \cdot \left(\frac{3}{8}\right)^2\right]^2 \cdot 2^4 = \quad (40) \\
& = \left[\left(\frac{2}{8}\right)^2\right]^2 \cdot 2^4 = \left[\frac{2}{8}\right]^4 \cdot 2^4 = \\
& = \left[\frac{1}{4}\right]^4 \cdot 2^4 = \left[\frac{2}{4}\right]^4 = \left[\frac{1}{2}\right]^4 = \frac{1}{16}.
\end{aligned}$$

$$\begin{aligned}
& \left[\left(-\frac{2}{50}\right)^2 \cdot \left(\frac{2}{50}\right)^3\right] \cdot \left(\frac{25}{3}\right)^5 = \\
& = \left[\left(-\frac{1}{25}\right)^2 \cdot \left(\frac{1}{25}\right)^3\right] \cdot \left(\frac{25}{3}\right)^5 = \quad (41) \\
& = \left[\left(\frac{1}{25}\right)^5\right] \cdot \left(\frac{25}{3}\right)^5 = \left(\frac{1}{3}\right)^5 = \frac{1}{243}.
\end{aligned}$$

$$\begin{aligned}
& (4^0 \cdot 0) + \left[\left(\frac{2}{15} \right)^3 \cdot \left(\frac{3}{2} \right)^3 \right]^2 \cdot 5^6 = \\
& = 0 + \left[\left(\frac{2}{15} \right)^3 \cdot \left(\frac{3}{2} \right)^3 \right]^2 \cdot 5^6 = \\
& = \left[\left(\frac{3}{15} \right)^3 \right]^2 \cdot 5^6 = \left[\left(\frac{1}{5} \right)^3 \right]^2 \cdot 5^6 = \\
& = \left(\frac{1}{5} \right)^6 \cdot 5^6 = 1.
\end{aligned} \tag{42}$$

$$\begin{aligned}
& \left[-\left(\frac{1}{2} \right)^3 \cdot \left(-\frac{4}{14} \right)^3 \right] : \left(\frac{15}{21} \right)^3 = \\
& = \left[-\left(\frac{1}{2} \right)^3 \cdot \left(-\frac{2}{7} \right)^3 \right] : \left(\frac{5}{7} \right)^3 = \\
& = \left[\left(\frac{1}{7} \right)^3 \right] : \left(\frac{5}{7} \right)^3 = \left(\frac{1}{7} \right)^3 \cdot \left(\frac{7}{5} \right)^3 = \left(\frac{1}{5} \right)^3 = \frac{1}{125}.
\end{aligned} \tag{43}$$

$$\begin{aligned}
& \left[\left(\frac{8}{6} \right)^2 \right]^3 \cdot \left(\frac{3}{2} \right)^6 \cdot \left(-\frac{3}{6} \right)^6 = \\
& = \left[\left(\frac{4}{3} \right)^2 \right]^3 \cdot \left(\frac{3}{2} \right)^6 \cdot \left(-\frac{1}{2} \right)^6 = \\
& = \left(\frac{4}{3} \right)^6 \cdot \left(\frac{3}{2} \right)^6 \cdot \frac{1}{2}^6 = \left(\frac{4}{2} \right)^6 \cdot \frac{1}{2}^6 = 2^6 \cdot \left(\frac{1}{2} \right)^6 = 1.
\end{aligned} \tag{44}$$

$$\begin{aligned}
& \left[\left(\frac{8}{10} \right)^2 \cdot \left(-\frac{4}{5} \right)^3 \right]^2 : \left(-\frac{12}{15} \right)^8 = \\
& = \left[\left(\frac{4}{5} \right)^2 \cdot \left(-\frac{4}{5} \right)^3 \right]^2 : \left(-\frac{4}{5} \right)^8 = \\
& = \left[\left(-\frac{4}{5} \right)^5 \right]^2 : \left(\frac{4}{5} \right)^8 = \left[\frac{4}{5} \right]^{10} : \left(\frac{4}{5} \right)^8 = \left[\frac{4}{5} \right]^2 = \frac{16}{25}.
\end{aligned} \tag{45}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{4}{8} \right)^{47} \right]^3 \cdot \left(\frac{4}{6} \right)^{12} \right\} : \left(-\frac{2}{6} \right)^{10} = \\
& = \left\{ \left[\left(\frac{1}{2} \right)^{47} \right]^3 \cdot \left(\frac{2}{3} \right)^{12} \right\} : \left(-\frac{1}{3} \right)^{10} = \\
& = \left\{ \left(\frac{1}{2} \right)^{12} \cdot \left(\frac{2}{3} \right)^{12} \right\} : \left(\frac{1}{3} \right)^{10} = \left(\frac{1}{3} \right)^{12} : \left(\frac{1}{3} \right)^{10} = \\
& = \left(\frac{1}{3} \right)^{12} \cdot 3^{10} = \left(\frac{1}{3} \right)^2 = \frac{1}{9}.
\end{aligned} \tag{46}$$

$$\begin{aligned}
& \left\{ \left(-\frac{2}{4}\right)^3 \cdot \left[\left(-\frac{1}{2}\right)^3 \right]^2 \right\} \cdot (-2)^7 = \\
& = \left\{ \left(-\frac{1}{2}\right)^3 \cdot \left[\left(-\frac{1}{2}\right)^3 \right]^2 \right\} \cdot (-2)^7 = \\
& = \left\{ \left(-\frac{1}{2}\right)^3 \cdot \left(\frac{1}{2}\right)^6 \right\} \cdot (-2)^7 = \left\{ \left(-\frac{1}{2}\right)^9 \right\} \cdot (-2)^7 = \\
& = \left(-\frac{1}{2}\right)^9 \cdot (-2)^7 = \left(\frac{1}{2}\right)^2 = \frac{1}{4}.
\end{aligned} \tag{47}$$

$$\begin{aligned}
& \left[\left(-\frac{3}{5}\right)^4 \cdot \left(\frac{10}{18}\right)^4 \cdot \left(-\frac{2}{6}\right)^7 \right] : \left[\left(-\frac{2}{6}\right)^{5 \cdot 2} \right] = \\
& = \left[\left(-\frac{3}{5}\right)^4 \cdot \left(\frac{5}{9}\right)^4 \cdot \left(-\frac{1}{3}\right)^7 \right] : \left[\left(-\frac{1}{3}\right)^{5 \cdot 2} \right] = \\
& = \left[\left(\frac{3}{9}\right)^4 \cdot \left(-\frac{1}{3}\right)^7 \right] : \left(\frac{1}{3}\right)^{10} = \left[\left(\frac{1}{3}\right)^4 \cdot \left(-\frac{1}{3}\right)^7 \right] : \left(\frac{1}{3}\right)^{10} = \\
& = \left(-\frac{1}{3}\right)^{11} \cdot 3^{10} = -\frac{1}{3}.
\end{aligned} \tag{48}$$

$$\begin{aligned}
& \left[\left(-\frac{2}{8}\right)^6 : \left(-\frac{1}{2}\right)^{2 \cdot 3} \right] : \left(\frac{1}{2}\right)^4 + \left(\frac{3}{6}\right)^2 = \\
& = \left[\left(-\frac{1}{4}\right)^6 : \left(-\frac{1}{2}\right)^6 \right] : \left(\frac{1}{2}\right)^4 + \left(\frac{1}{2}\right)^2 = \\
& = [4^{-6} : 2^{-6}] : 2^{-4} + \left(\frac{1}{2}\right)^2 = 2^{-6} : 2^{-4} + \left(\frac{1}{2}\right)^2 = \\
& = 2^{-2} + \left(\frac{1}{2}\right)^2 = \left(\frac{1}{2}\right)^2 + \left(\frac{1}{2}\right)^2 = \frac{1}{4} + \frac{1}{4} = \\
& = \frac{1+1}{4} = \frac{2}{4} = \frac{1}{2}.
\end{aligned} \tag{49}$$

$$\begin{aligned}
& \left(-\frac{4}{6}\right)^3 - \left(-\frac{2}{3}\right)^2 \cdot \left(-\frac{6}{9}\right)^4 : \left(-\frac{2}{3}\right)^3 + \left(-\frac{1}{3}\right)^0 = \\
& = \left(-\frac{2}{3}\right)^3 - \left(-\frac{2}{3}\right)^2 \cdot \left(-\frac{2}{3}\right)^4 : \left(-\frac{2}{3}\right)^3 + \left(-\frac{1}{3}\right)^0 = \\
& = \left(-\frac{2}{3}\right)^3 - \left(\frac{2}{3}\right)^6 : \left(-\frac{2}{3}\right)^3 + 1 = \\
& = -\left(\frac{2}{3}\right)^3 + \left(\frac{2}{3}\right)^3 + 1 = 1.
\end{aligned} \tag{50}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{2}{8} \right)^2 \cdot \left(\frac{2}{5} \right)^2 \right]^3 : \left[\left(\frac{1}{5} \right)^3 \right]^2 \right\} \cdot \left[\left(\frac{2}{3} \right)^6 : \left(\frac{1}{3} \right)^6 \right] = \\
& = \left\{ \left[\left(\frac{1}{4} \right)^2 \cdot \left(\frac{2}{5} \right)^2 \right]^3 : \left[\left(\frac{1}{5} \right)^3 \right]^2 \right\} \cdot \left[\left(\frac{2}{3} \right)^6 : \left(\frac{1}{3} \right)^6 \right] = \\
& \quad = \left\{ \left[\left(\frac{2}{20} \right)^2 \right]^3 : \left(\frac{1}{5} \right)^6 \right\} \cdot \left[\left(\frac{2}{3} \right)^6 \cdot 3^6 \right] = \tag{51} \\
& = \left\{ \left(\frac{1}{10} \right)^6 : \left(\frac{1}{5} \right)^6 \right\} \cdot 2^6 = \left\{ \left(\frac{1}{10} \right)^6 \cdot 5^6 \right\} \cdot 2^6 = \\
& \quad = \left(\frac{5}{10} \right)^6 \cdot 2^6 = \left(\frac{1}{2} \right)^6 \cdot 2^6 = 1.
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{3}{12} \right)^2 \cdot \left(\frac{1}{4} \right)^3 \right]^2 \cdot \left(\frac{8}{10} \right)^{10} \right\} : \left[\left(\frac{3}{25} \right)^5 \cdot \frac{1}{3^3} \right] = \\
& = \left\{ \left[\left(\frac{1}{4} \right)^2 \cdot \left(\frac{1}{4} \right)^3 \right]^2 \cdot \left(\frac{4}{5} \right)^{10} \right\} : \left[\left(\frac{3}{25} \right)^5 \cdot \frac{1}{3^3} \right] = \tag{52} \\
& = \left\{ \left[\left(\frac{1}{4} \right)^5 \right]^2 \cdot \left(\frac{4}{5} \right)^{10} \right\} : \frac{3^2}{25^5} = \left\{ \left(\frac{1}{4} \right)^{10} \cdot \left(\frac{4}{5} \right)^{10} \right\} : \frac{3^2}{25^5} = \\
& \quad = \left\{ \left(\frac{4}{20} \right)^{10} \right\} : \frac{3^2}{25^5} = \left\{ \left(\frac{1}{5} \right)^{10} \right\} \cdot \frac{5^{10}}{3^2} = \frac{1}{3^2} = \frac{1}{9}.
\end{aligned}$$

$$\begin{aligned}
& \left[\left(2^0 + \frac{1}{2} \right)^3 \cdot \left(2 - \frac{1}{2} \right)^5 \right]^2 \cdot \left(\frac{12}{8} \right)^2 : \left[\left(-\frac{3}{2} \right)^8 \cdot \left(\frac{3}{2} \right)^7 \right] - (0 \cdot 3) = \\
& = \left[\left(1 + \frac{1}{2} \right)^3 \cdot \left(2 - \frac{1}{2} \right)^5 \right]^2 \cdot \left(\frac{3}{2} \right)^2 : \left[\left(-\frac{3}{2} \right)^8 \cdot \left(\frac{3}{2} \right)^7 \right] - 0 = \\
& \quad = \left[\left(\frac{2+1}{2} \right)^3 \cdot \left(\frac{4-1}{2} \right)^5 \right]^2 \cdot \left(\frac{3}{2} \right)^2 : \left(\frac{3}{2} \right)^{15} = \\
& \quad = \left[\left(\frac{3}{2} \right)^3 \cdot \left(\frac{3}{2} \right)^5 \right]^2 \cdot \left(\frac{3}{2} \right)^2 : \left(\frac{3}{2} \right)^{15} = \tag{53} \\
& \quad = \left[\left(\frac{3}{2} \right)^8 \right]^2 \cdot \left(\frac{3}{2} \right)^2 : \left(\frac{3}{2} \right)^{15} = \\
& \quad = \left(\frac{3}{2} \right)^{16} \cdot \left(\frac{3}{2} \right)^2 : \left(\frac{3}{2} \right)^{15} = \\
& \quad = \left(\frac{3}{2} \right)^{18} : \left(\frac{3}{2} \right)^{15} = \left(\frac{3}{2} \right)^3 = \frac{27}{8}.
\end{aligned}$$

$$\begin{aligned}
& \left(\frac{3}{5}\right)^8 : \left(3^0 - \frac{2}{5}\right)^5 \cdot \left[\left(4 : 2 + \frac{1}{2}\right)^2 \cdot \frac{5}{2}\right] - 6^0 = \\
& = \left(\frac{3}{5}\right)^8 : \left(1 - \frac{2}{5}\right)^5 \cdot \left[\left(2 + \frac{1}{2}\right)^2 \cdot \frac{5}{2}\right] - 1 = \\
& = \left(\frac{3}{5}\right)^8 : \left(\frac{5-2}{5}\right)^5 \cdot \left[\left(\frac{4+1}{2}\right)^2 \cdot \frac{5}{2}\right] - 1 = \\
& = \left(\frac{3}{5}\right)^8 : \left(\frac{3}{5}\right)^5 \cdot \left[\left(\frac{5}{2}\right)^2 \cdot \frac{5}{2}\right] - 1 = \\
& = \left(\frac{3}{5}\right)^3 \cdot \left(\frac{5}{2}\right)^3 - 1 = \left(\frac{3}{2}\right)^3 - 1 = \\
& = \frac{27}{8} - 1 = \frac{27-8}{8} = \frac{19}{8}.
\end{aligned} \tag{54}$$

$$\begin{aligned}
& \left(4 : 2 - \frac{14}{9}\right)^2 : \left(-\frac{2}{3}\right)^2 - \left(2 \cdot 1 - \frac{5}{3}\right)^4 : \frac{1}{27} - \frac{4}{18} = \\
& = \left(2 - \frac{14}{9}\right)^2 : \left(-\frac{2}{3}\right)^2 - \left(2 - \frac{5}{3}\right)^4 : \frac{1}{27} - \frac{2}{9} = \\
& = \left(\frac{18-14}{9}\right)^2 : \left(\frac{2}{3}\right)^2 - \left(\frac{6-5}{3}\right)^4 : \frac{1}{27} - \frac{2}{9} = \\
& = \left(\frac{4}{9}\right)^2 : \left(\frac{2}{3}\right)^2 - \left(\frac{1}{3}\right)^4 : \frac{1}{27} - \frac{2}{9} = \\
& = \left(\frac{2}{3}\right)^4 : \left(\frac{2}{3}\right)^2 - \left(\frac{1}{3}\right)^4 : \left(\frac{1}{3}\right)^3 - \frac{2}{9} = \\
& = \left(\frac{2}{3}\right)^2 - \frac{1}{3} - \frac{2}{9} = \\
& = \frac{4}{9} - \frac{1}{3} - \frac{2}{9} = \frac{4-3-2}{9} = -\frac{1}{9}.
\end{aligned} \tag{55}$$

$$\begin{aligned}
& \left(7^0 - \frac{2}{8}\right)^2 \cdot \left(\frac{2}{3}\right)^2 + \left[\left(\frac{7}{2}\right)^2 \cdot \left(-3 - \frac{1}{2}\right)^3 : \left(-1 - \frac{5}{2}\right)^4 + 5^0\right] = \\
& = \left(1 - \frac{1}{4}\right)^2 \cdot \left(\frac{2}{3}\right)^2 + \left[\left(\frac{7}{2}\right)^2 \cdot \left(-3 - \frac{1}{2}\right)^3 : \left(-1 - \frac{5}{2}\right)^4 + 1\right] = \\
& = \left(\frac{4-1}{4}\right)^2 \cdot \left(\frac{2}{3}\right)^2 + \left[\left(\frac{7}{2}\right)^2 \cdot \left(\frac{-6-1}{2}\right)^3 : \left(\frac{-2-5}{2}\right)^4 + 1\right] = \\
& = \left(\frac{3}{4}\right)^2 \cdot \left(\frac{2}{3}\right)^2 + \left[\left(\frac{7}{2}\right)^2 \cdot \left(-\frac{7}{2}\right)^3 : \left(-\frac{7}{2}\right)^4 + 1\right] = \\
& = \left(\frac{1}{2}\right)^2 + \left[\left(-\frac{7}{2}\right)^5 : \left(\frac{7}{2}\right)^4 + 1\right] = \\
& = \left(\frac{1}{2}\right)^2 + \left[\left(-\frac{7}{2}\right) + 1\right] = \frac{1}{4} + \left[\frac{-7+2}{2}\right] = \\
& = \frac{1}{4} - \frac{5}{2} = \frac{1-10}{4} = -\frac{9}{4}.
\end{aligned} \tag{56}$$

$$\begin{aligned}
& \left(\frac{23}{4} - \frac{31}{8}\right) : \left(\frac{29}{6} - \frac{22}{6}\right) \cdot \left(\frac{49}{3^3}\right) = \\
& = \left(\frac{23}{4} - \frac{31}{8}\right) : \left(\frac{29}{6} - \frac{11}{3}\right) \cdot \left(\frac{49}{3^3}\right) = \\
& = \left(\frac{46-31}{8}\right) : \left(\frac{29-22}{6}\right) \cdot \left(\frac{49}{27}\right) = \\
& = \left(\frac{15}{8}\right) : \left(\frac{7}{6}\right) \cdot \left(\frac{49}{27}\right) = \\
& = \frac{15}{8} \cdot \frac{6}{7} \cdot \frac{49}{27} = \frac{15}{4} \cdot \frac{3}{7} \cdot \frac{49}{27} = \\
& = \frac{5}{4} \cdot \frac{7}{3} = \frac{35}{12}.
\end{aligned} \tag{57}$$

$$\begin{aligned}
& \left[\left(\frac{14}{12} - \frac{3}{4}\right) : \left(2 - \frac{1}{8}\right)\right] \cdot 9 - \frac{3}{4} = \\
& = \left[\left(\frac{7}{6} - \frac{3}{4}\right) : \left(2 - \frac{1}{8}\right)\right] \cdot 9 - \frac{3}{4} = \\
& = \left[\left(\frac{14-9}{12}\right) : \left(\frac{16-1}{8}\right)\right] \cdot 9 - \frac{3}{4} = \\
& = \left[\frac{5}{12} : \frac{15}{8}\right] \cdot 9 - \frac{3}{4} = \left[\frac{5}{12} \cdot \frac{8}{15}\right] \cdot 9 - \frac{3}{4} = \\
& = \left[\frac{1}{3} \cdot \frac{2}{3}\right] \cdot 9 - \frac{3}{4} = \frac{2}{9} \cdot 9 - \frac{3}{4} = \\
& = 2 - \frac{3}{4} = \frac{8-3}{4} = \frac{5}{4}.
\end{aligned} \tag{58}$$

$$\begin{aligned}
& -\frac{1}{9} + \left(\frac{4}{6}\right)^2 \cdot \frac{13}{6} + \left[\left(2^0 - \frac{1}{2}\right)^3 : \left(3^0 + \frac{1}{2}\right)^3\right] + \frac{2}{18} = \\
& = -\frac{1}{9} + \left(\frac{2}{3}\right)^2 \cdot \frac{13}{6} + \left[\left(1 - \frac{1}{2}\right)^3 : \left(1 + \frac{1}{2}\right)^3\right] + \frac{1}{9} = \\
& = -\frac{1}{9} + \frac{4}{9} \cdot \frac{13}{6} + \left[\left(\frac{2-1}{2}\right)^3 : \left(\frac{2+1}{2}\right)^3\right] + \frac{1}{9} = \\
& = -\frac{1}{9} + \frac{2}{9} \cdot \frac{13}{3} + \left[\left(\frac{1}{2}\right)^3 : \left(\frac{3}{2}\right)^3\right] + \frac{1}{9} = \\
& = -\frac{1}{9} + \frac{26}{27} + \left[\frac{1}{8} : \frac{27}{8}\right] + \frac{1}{9} = \\
& = -\frac{1}{9} + \frac{26}{27} + \left[\frac{1}{8} \cdot \frac{8}{27}\right] + \frac{1}{9} = \\
& = -\frac{1}{9} + \frac{26}{27} + \frac{1}{27} + \frac{1}{9} = \frac{27}{27} = 1.
\end{aligned} \tag{59}$$

$$\begin{aligned}
& \left(\frac{7}{4}\right)^3 : \left[\left(\frac{8}{6} - \frac{2}{5}\right) \cdot \frac{15}{8}\right] - \frac{34}{32} = \\
& = \left(\frac{7}{4}\right)^3 : \left[\left(\frac{4}{3} - \frac{2}{5}\right) \cdot \frac{15}{8}\right] - \frac{17}{16} = \\
& = \left(\frac{7}{4}\right)^3 : \left[\left(\frac{20-6}{15}\right) \cdot \frac{15}{8}\right] - \frac{17}{16} = \\
& = \left(\frac{7}{4}\right)^3 : \left[\left(\frac{14}{15}\right) \cdot \frac{15}{8}\right] - \frac{17}{16} = \\
& = \left(\frac{7}{4}\right)^3 : \frac{14}{8} - \frac{17}{16} = \\
& = \left(\frac{7}{4}\right)^3 : \frac{7}{4} - \frac{17}{16} = \\
& = \left(\frac{7}{4}\right)^2 - \frac{17}{16} = \\
& = \frac{49}{16} - \frac{17}{16} = \frac{32}{16} = 2.
\end{aligned} \tag{60}$$

$$\begin{aligned}
& \left[\left(3 + \frac{2}{5}\right) : \left(2 + \frac{3}{24}\right)\right] \cdot \frac{5}{4} - \left[\left(\frac{2}{3}\right)^3 : \left(\frac{2}{3}\right)\right] + \frac{8}{18} = \\
& = \left[\left(3 + \frac{2}{5}\right) : \left(2 + \frac{1}{8}\right)\right] \cdot \frac{5}{4} - \left[\left(\frac{2}{3}\right)^3 : \left(\frac{2}{3}\right)\right] + \frac{4}{9} = \\
& = \left[\left(\frac{15+2}{5}\right) : \left(\frac{16+1}{8}\right)\right] \cdot \frac{5}{4} - \left(\frac{2}{3}\right)^2 + \frac{4}{9} = \\
& = \left[\left(\frac{17}{5}\right) : \left(\frac{17}{8}\right)\right] \cdot \frac{5}{4} - \frac{4}{9} + \frac{4}{9} = \\
& = \left[\frac{17}{5} \cdot \frac{8}{17}\right] \cdot \frac{5}{4} = \\
& = \left[\frac{8}{5}\right] \cdot \frac{5}{4} = \\
& = \frac{8}{4} = 2.
\end{aligned} \tag{61}$$

$$\begin{aligned}
& -2 + \frac{4}{8} - \left(\frac{3}{2}\right)^2 - \frac{1}{12} + \left[\left(\frac{2}{3} : \frac{8}{30}\right)^3 : \frac{75}{28}\right] = \\
& = -2 + \frac{1}{2} - \left(\frac{3}{2}\right)^2 - \frac{1}{12} + \left[\left(\frac{2}{3} : \frac{4}{15}\right)^3 : \frac{75}{28}\right] = \\
& = -2 + \frac{1}{2} - \frac{9}{4} - \frac{1}{12} + \left[\left(\frac{2}{3} \cdot \frac{15}{4}\right)^3 \cdot \frac{28}{75}\right] = \\
& = -2 + \frac{1}{2} - \frac{9}{4} - \frac{1}{12} + \left[\left(\frac{1}{1} \cdot \frac{5}{2}\right)^3 \cdot \frac{28}{75}\right] = \\
& = -2 + \frac{1}{2} - \frac{9}{4} - \frac{1}{12} + \left[\left(\frac{5}{2}\right)^3 \cdot \frac{28}{75}\right] = \\
& = -2 + \frac{1}{2} - \frac{9}{4} - \frac{1}{12} + \left[\frac{125}{8} \cdot \frac{28}{75}\right] = \\
& = -2 + \frac{1}{2} - \frac{9}{4} - \frac{1}{12} + \frac{35}{6} = \\
& = \frac{-24 + 6 - 27 - 1 + 70}{12} = \frac{24}{12} = 2.
\end{aligned} \tag{62}$$

$$\begin{aligned}
& \left[\left(\frac{5}{4} + \frac{18}{20} - \frac{15}{9}\right) : \frac{58}{45}\right]^2 : \left(\frac{3}{4}\right)^2 + \frac{3}{6} - 2 = \\
& = \left[\left(\frac{5}{4} + \frac{9}{10} - \frac{5}{3}\right) : \frac{58}{45}\right]^2 : \left(\frac{3}{4}\right)^2 + \frac{1}{2} - 2 = \\
& = \left[\left(\frac{75 + 54 - 100}{60}\right) : \frac{58}{45}\right]^2 : \frac{9}{16} + \frac{1}{2} - 2 = \\
& = \left[\frac{29}{60} \cdot \frac{45}{58}\right]^2 \cdot \frac{16}{9} + \frac{1}{2} - 2 = \\
& = \left[\frac{3}{8}\right]^2 \cdot \frac{16}{9} + \frac{1}{2} - 2 = \\
& = \frac{9}{64} \cdot \frac{16}{9} + \frac{1}{2} - 2 = \\
& = \frac{1}{4} + \frac{1}{2} - 2 = \frac{1 + 2 - 8}{4} = -\frac{5}{4}.
\end{aligned} \tag{63}$$

$$\begin{aligned}
& \left\{ \frac{2}{6} + \left[\left(\frac{2}{3} \right)^2 \cdot \left(\frac{8}{12} \right)^4 \right]^2 : \left(\frac{2}{3} \right)^{10} \right\} \cdot \left(\frac{3}{49} \right) + \frac{1}{4} - \frac{2}{3} = \\
& = \left\{ \frac{1}{3} + \left[\left(\frac{2}{3} \right)^2 \cdot \left(\frac{2}{3} \right)^4 \right]^2 : \left(\frac{2}{3} \right)^{10} \right\} \cdot \left(\frac{3}{49} \right) + \frac{1}{4} - \frac{2}{3} = \\
& = \left\{ \frac{1}{3} + \left[\left(\frac{2}{3} \right)^6 \right]^2 : \left(\frac{2}{3} \right)^{10} \right\} \cdot \frac{3}{49} + \frac{1}{4} - \frac{2}{3} = \\
& = \left\{ \frac{1}{3} + \left(\frac{2}{3} \right)^{12} : \left(\frac{2}{3} \right)^{10} \right\} \cdot \frac{3}{49} + \frac{1}{4} - \frac{2}{3} = \\
& = \left\{ \frac{1}{3} + \left(\frac{2}{3} \right)^2 \right\} \cdot \frac{3}{49} + \frac{1}{4} - \frac{2}{3} = \tag{64} \\
& = \left\{ \frac{1}{3} + \frac{4}{9} \right\} \cdot \frac{3}{49} + \frac{1}{4} - \frac{2}{3} = \\
& = \frac{3+4}{9} \cdot \frac{3}{49} + \frac{1}{4} - \frac{2}{3} = \\
& = \frac{7}{9} \cdot \frac{3}{49} + \frac{1}{4} - \frac{2}{3} = \\
& = \frac{1}{3} \cdot \frac{1}{7} + \frac{1}{4} - \frac{2}{3} = \\
& = \frac{1}{21} + \frac{1}{4} - \frac{2}{3} = \frac{4+21-56}{84} = -\frac{31}{84}.
\end{aligned}$$

$$\begin{aligned}
& (-2+5)^3 : (5-2)^2 - \left(2 + \frac{6}{4} \right) \cdot \left[4^0 - \left(\frac{3}{4} + 2 - \frac{26}{14} \right) \right] + \frac{9}{12} = \\
& = (-2+5)^3 : (5-2)^2 - \left(2 + \frac{3}{2} \right) \cdot \left[1 - \left(\frac{3}{4} + 2 - \frac{13}{7} \right) \right] + \frac{3}{4} = \\
& = (3)^3 : (3)^2 - \left(\frac{4+3}{2} \right) \cdot \left[1 - \left(\frac{21+56-52}{28} \right) \right] + \frac{3}{4} = \\
& = 27 : 9 - \frac{7}{2} \cdot \left[1 - \frac{25}{28} \right] + \frac{3}{4} = \tag{65} \\
& = 3 - \frac{7}{2} \cdot \left[\frac{28-25}{28} \right] + \frac{3}{4} = \\
& = 3 - \frac{7}{2} \cdot \frac{3}{28} + \frac{3}{4} = 3 - \frac{1}{2} \cdot \frac{3}{4} + \frac{3}{4} = \\
& = 3 - \frac{3}{8} + \frac{3}{4} = \frac{24-3+6}{8} = \frac{27}{8}.
\end{aligned}$$

$$\begin{aligned}
& \left(-3^0 + \frac{4}{5} - \frac{7}{5}\right)^2 \cdot \left\{ \left[\left(2^0 - \frac{1}{2} + \frac{8}{20}\right) : 10 + \frac{1}{25} + \frac{1}{50} \right] : \left[\left(\frac{3}{5}\right) \cdot (-1) \right]^2 \right\} + \frac{6}{15} = \\
& = \left(-1 + \frac{4}{5} - \frac{7}{5}\right)^2 \cdot \left\{ \left[\left(1 - \frac{1}{2} + \frac{2}{5}\right) : 10 + \frac{1}{25} + \frac{1}{50} \right] : \left[\left(\frac{3}{5}\right) \cdot (-1) \right]^2 \right\} + \frac{2}{5} = \\
& = \left(\frac{-5+4-7}{5}\right)^2 \cdot \left\{ \left[\left(\frac{10-5+4}{10}\right) \cdot \frac{1}{10} + \frac{1}{25} + \frac{1}{50} \right] : \left[-\frac{3}{5}\right]^2 \right\} + \frac{2}{5} = \\
& = \left(-\frac{8}{5}\right)^2 \cdot \left\{ \left[\left(\frac{9}{10}\right) \cdot \frac{1}{10} + \frac{1}{25} + \frac{1}{50} \right] : \frac{9}{25} \right\} + \frac{2}{5} = \\
& = \frac{64}{25} \cdot \left\{ \left[\frac{9}{10} \cdot 110 + \frac{1}{25} + \frac{1}{50} \right] : \frac{9}{25} \right\} + \frac{2}{5} = \frac{64}{25} \cdot \left\{ \left[\frac{9}{100} + \frac{1}{25} + \frac{1}{50} \right] : \frac{9}{25} \right\} + \frac{2}{5} = \\
& = \frac{64}{25} \cdot \left\{ \left[\frac{9+4+2}{100} \right] \cdot \frac{25}{9} \right\} + \frac{2}{5} = \frac{64}{25} \cdot \left\{ \frac{15}{100} \cdot \frac{25}{9} \right\} + \frac{2}{5} = \\
& = \frac{64}{25} \cdot \frac{5}{12} + \frac{2}{5} = \frac{16}{15} + \frac{2}{5} = \frac{16+6}{15} = \frac{22}{15}.
\end{aligned} \tag{66}$$

$$\begin{aligned}
& \left[\left(1 - \frac{10}{8}\right)^3 : \left(1^0 + \frac{1}{8} - \frac{7}{4}\right) - 1 + \frac{3}{5} \right]^2 : \left[\left(-\frac{6}{5}\right) : \left(\frac{8}{5}\right) \right]^3 + 4^0 = \\
& = \left[\left(1 - \frac{5}{4}\right)^3 : \left(1 + \frac{1}{8} - \frac{7}{4}\right) - 1 + \frac{3}{5} \right]^2 : \left[\left(-\frac{6}{5}\right) : \left(\frac{8}{5}\right) \right]^3 + 1 = \\
& = \left[\left(\frac{4-5}{4}\right)^3 : \left(\frac{8+1-14}{8}\right) - 1 + \frac{3}{5} \right]^2 : \left[\left(-\frac{6}{5}\right) \cdot \frac{5}{8} \right]^3 + 1 = \\
& = \left[\left(-\frac{1}{4}\right)^3 : \left(-\frac{5}{8}\right) - 1 + \frac{3}{5} \right]^2 : \left[-\frac{3}{4} \right]^3 + 1 = \\
& = \left[-\frac{1}{64} \cdot \left(-\frac{8}{5}\right) - 1 + \frac{3}{5} \right]^2 : \left[-\frac{27}{64} \right] + 1 = \tag{67} \\
& = \left[\frac{1}{40} - 1 + \frac{3}{5} \right]^2 : \left[-\frac{27}{64} \right] + 1 = \\
& = \left[\frac{1-40+24}{40} \right]^2 : \left[-\frac{27}{64} \right] + 1 = \\
& = \left[-\frac{15}{40} \right]^2 : \left[-\frac{27}{64} \right] + 1 = \\
& = \frac{225}{1600} \cdot \left[-\frac{64}{27} \right] + 1 = \\
& = -\frac{1}{3} + 1 = \frac{-1+3}{3} = \frac{2}{3}.
\end{aligned}$$

$$\begin{aligned}
& \frac{\left[\left(2 - \frac{4}{8} \right) + \left(-2 + \frac{1}{3} \right) + \left(4 - \frac{2}{12} \right) - 1 \right] : 2^3 - \frac{8}{6}}{\left\{ \left[(-2)^2 + (-3)^3 - \left(\frac{2}{3} \right)^0 \right] \cdot \left(-\frac{1}{5} \right)^2 - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \\
& = \frac{\left[\left(2 - \frac{1}{2} \right) + \left(-2 + \frac{1}{3} \right) + \left(4 - \frac{1}{6} \right) - 1 \right] : 2^3 - \frac{4}{3}}{\left\{ \left[(-2)^2 + (-3)^3 - \left(\frac{2}{3} \right)^0 \right] \cdot \left(-\frac{1}{5} \right)^2 - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \\
& = \frac{\left[\left(\frac{4-1}{2} \right) + \left(\frac{-6+1}{3} \right) + \left(\frac{24-1}{6} \right) - 1 \right] : 8 - \frac{4}{3}}{\left\{ [4 - 27 - 1] \cdot \frac{1}{25} - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \\
& = \frac{\left[\frac{3}{2} - \frac{5}{3} + \frac{23}{6} - 1 \right] : 8 - \frac{4}{3}}{\left\{ [-24] \cdot \frac{1}{25} - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \tag{68} \\
& = \frac{\left[\frac{9-10+23-6}{6} \right] : 8 - \frac{4}{3}}{\left\{ -\frac{24}{25} - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \frac{\left[\frac{16}{6} \right] : 8 - \frac{4}{3}}{\left\{ -\frac{25}{25} \right\} \cdot \frac{3}{4}} = \\
& = \frac{\left[\frac{8}{3} \right] \cdot 18 - \frac{4}{3}}{\{-1\} \cdot \frac{3}{4}} = \frac{\frac{1}{3} - \frac{4}{3}}{-\frac{3}{4}} = \\
& = \frac{-\frac{3}{3}}{-\frac{3}{4}} = 1 \cdot \frac{4}{3} = \frac{4}{3}.
\end{aligned}$$

$$\begin{aligned}
& \left\{ 3 \cdot 1 + \frac{1}{2} \cdot \left[1 + \left(1^5 + \frac{1}{2} \right)^2 : \frac{3}{2} \right]^2 - \left(\frac{1}{4} - \frac{1}{2} + 3^0 \right)^2 \right\} : \left(\frac{19}{2^3} \right) + 1 - \frac{1}{4} = \\
& = \left\{ 1 + \frac{1}{2} \cdot \left[1 + \left(1 + \frac{1}{2} \right)^2 : \frac{3}{2} \right]^2 - \left(\frac{1}{4} - \frac{1}{2} + 1 \right)^2 \right\} : \left(\frac{19}{2^3} \right) + 1 - \frac{1}{4} = \\
& = \left\{ 1 + \frac{1}{2} \cdot \left[1 + \left(\frac{2+1}{2} \right)^2 \cdot \frac{2}{3} \right]^2 - \left(\frac{1-2+4}{4} \right)^2 \right\} \cdot \left(\frac{8}{19} \right) + 1 - \frac{1}{4} = \\
& = \left\{ 1 + \frac{1}{2} \cdot \left[1 + \left(\frac{3}{2} \right)^2 \cdot \frac{2}{3} \right]^2 - \left(\frac{3}{4} \right)^2 \right\} \cdot \left(\frac{8}{19} \right) + 1 - \frac{1}{4} = \\
& = \left\{ 1 + \frac{1}{2} \cdot \left[1 + \frac{9}{4} \cdot \frac{2}{3} \right]^2 - \frac{9}{16} \right\} \cdot \frac{8}{19} + 1 - \frac{1}{4} = \\
& = \left\{ 1 + \frac{1}{2} \cdot \left[1 + \frac{3}{2} \right]^2 - \frac{9}{16} \right\} \cdot \frac{8}{19} + 1 - \frac{1}{4} = \\
& = \left\{ 1 + \frac{1}{2} \cdot \left[\frac{2+3}{2} \right]^2 - \frac{9}{16} \right\} \cdot \frac{8}{19} + 1 - \frac{1}{4} = \tag{69} \\
& = \left\{ 1 + \frac{1}{2} \cdot \left[\frac{5}{2} \right]^2 - \frac{9}{16} \right\} \cdot \frac{8}{19} + 1 - \frac{1}{4} = \\
& = \left\{ 1 + \frac{1}{2} \cdot \frac{25}{4} - \frac{9}{16} \right\} \cdot \frac{8}{19} + 1 - \frac{1}{4} = \\
& = \left\{ 1 + \frac{25}{8} - \frac{9}{16} \right\} \cdot \frac{8}{19} + 1 - \frac{1}{4} = \\
& = \left\{ \frac{16+50-9}{16} \right\} \cdot \frac{8}{19} + 1 - \frac{1}{4} = \\
& = \frac{57}{16} \cdot \frac{8}{19} + 1 - \frac{1}{4} = \\
& = \frac{3}{2} + 1 - \frac{1}{4} = \\
& = \frac{3}{2} + 1 - \frac{1}{4} = \\
& = \frac{6+4-1}{4} = \frac{9}{4}.
\end{aligned}$$

$$\begin{aligned}
& \frac{\left(2 - \frac{3}{5} - \frac{33}{15}\right) + \left(4^0 + \frac{4}{3} - \frac{4}{8} : 3 - 1 + \frac{1}{6}\right)^3 : \frac{5}{27}}{\left(2^0 - \frac{1}{4}\right) : \frac{3}{8} + \frac{25}{32} : \left(1 - \frac{1}{2} : 2^2 - \frac{3}{2} : 6\right)^2} = \\
& = \frac{\left(2 - \frac{3}{5} - \frac{33}{15}\right) + \left(1 + \frac{4}{3} - \frac{1}{2} : 3 - 1 + \frac{1}{6}\right)^3 : \frac{5}{27}}{\left(1 - \frac{1}{4}\right) : \frac{3}{8} + \frac{25}{32} : \left(1 - \frac{1}{2} : 4 - \frac{3}{2} : 6\right)^2} = \\
& = \frac{\left(\frac{30-9-33}{15}\right) + \left(1 + \frac{4}{3} - \frac{1}{2} \cdot \frac{1}{3} - 1 + \frac{1}{6}\right)^3 \cdot \frac{27}{5}}{\left(\frac{4-1}{4}\right) \cdot \frac{8}{3} + \frac{25}{32} : \left(1 - \frac{1}{2} \cdot \frac{1}{4} - \frac{3}{2} \cdot \frac{1}{6}\right)^2} = \\
& = \frac{-\frac{12}{15} + \left(1 + \frac{4}{3} - \frac{1}{6} - 1 + \frac{1}{6}\right)^3 \cdot \frac{27}{5}}{\frac{3}{4} \cdot \frac{8}{3} + \frac{25}{32} : \left(1 - \frac{1}{8} - \frac{1}{2} \cdot \frac{1}{2}\right)^2} = \\
& = \frac{-\frac{12}{15} + \left(\frac{4}{3}\right)^3 \cdot \frac{27}{5}}{2 + \frac{25}{32} : \left(1 - \frac{1}{8} - \frac{1}{4}\right)^2} = \frac{-\frac{12}{15} + \frac{64}{5}}{2 + \frac{25}{32} : \left(\frac{8-1-2}{8}\right)^2} = \\
& = \frac{-\frac{12}{15} + \frac{192}{15}}{2 + \frac{25}{32} : \left(\frac{5}{8}\right)^2} = \frac{\frac{180}{15}}{2 + \frac{25}{32} : \frac{25}{64}} = \\
& = \frac{12}{2 + \frac{25}{32} \cdot \frac{64}{25}} = \frac{12}{2+2} = \frac{12}{4} = 3.
\end{aligned}$$

(70)

$$3^2 \cdot 3^{-5} \cdot 3^4 \cdot 3^{-1} \cdot 4^0 = 3^0 \cdot 1 = 1. \quad (71)$$

$$2^{-6} : 2^{-4} = 2^{-2} = \left(\frac{1}{2}\right)^2 = \frac{1}{4}. \quad (72)$$

$$1 \cdot 4^{-1} \cdot 5^{-1} \cdot (2)^{-1} = \frac{1}{4} \cdot \frac{1}{5} \cdot \left(-\frac{1}{2}\right) = -\frac{1}{40}. \quad (73)$$

$$16^{-2} : 8^{-2} = 2^{-2} = \left(\frac{1}{2}\right)^2 = \frac{1}{4}. \quad (74)$$

$$\left[(-3)^{-3}\right]^2 = (-3)^{-6} = \left(-\frac{1}{3}\right)^6 = \left(\frac{1}{3}\right)^6 = \frac{1}{3^6}. \quad (75)$$

$$\left[\left(\frac{1}{5}\right)^6 : \left(\frac{1}{5}\right)^1\right]^2 \cdot \frac{1}{5}^{-7} = \left[\left(\frac{1}{5}\right)^5\right]^2 \cdot \frac{1}{5}^{-7} = \left(\frac{1}{5}\right)^{10} \cdot \frac{1}{5}^{-7} = \left(\frac{1}{5}\right)^3 = \frac{1}{125}. \quad (76)$$

$$\left[\left(\frac{2}{3}\right)^2\right]^{-1} \cdot \left(\frac{1}{2}\right)^{-2} \cdot \left(\frac{1}{3}\right)^3 = \left(\frac{2}{3}\right)^{-2} \cdot 2^2 \cdot \left(\frac{1}{3}\right)^3 = \left(\frac{3}{2}\right)^2 \cdot 4 \cdot \frac{1}{27} = \frac{9}{4} \cdot 4 \cdot \frac{1}{27} = \frac{9}{27} = \frac{1}{3}. \quad (77)$$

$$\begin{aligned} & \left[(2^4 \cdot 2^{-5})^{-1} \cdot 2^{-4}\right]^{-1} : 8 = \\ & \left[(2^{-1})^{-1} \cdot 2^{-4}\right]^{-1} : 2^3 = \\ & \left[2 \cdot 2^{-4}\right]^{-1} : 2^3 = \\ & [2^{-3}]^{-1} : 2^3 = 2^3 : 2^3 = 2^0 = 1. \end{aligned} \quad (78)$$

$$\begin{aligned} & \left[\left(\frac{5}{4}\right)^7 : \left(\frac{5}{4}\right)^2\right]^{-2} \cdot \left(\frac{5}{4}\right)^8 = \\ & = \left[\left(\frac{5}{4}\right)^5\right]^{-2} \cdot \left(\frac{5}{4}\right)^8 = \\ & = \left(\frac{5}{4}\right)^{-10} \cdot \left(\frac{5}{4}\right)^8 = \\ & = \left(\frac{5}{4}\right)^{-2} = \left(\frac{4}{5}\right)^2 = \frac{16}{25}. \end{aligned} \quad (79)$$

$$\begin{aligned} & \left\{\left[\left(\frac{3}{4}\right)^2\right]^{-1} \cdot \left(\frac{2}{9}\right)^{-2}\right\} : \left(\frac{1}{6}\right)^{-3} = \\ & = \left\{\left(\frac{3}{4}\right)^{-2} \cdot \left(\frac{2}{9}\right)^{-2}\right\} : \left(\frac{1}{6}\right)^{-3} = \\ & = \left(\frac{1}{6}\right)^{-2} : \left(\frac{1}{6}\right)^{-3} = \\ & = \left(\frac{1}{6}\right)^1 = \frac{1}{6}. \end{aligned} \quad (80)$$

$$\begin{aligned} & \left\{\left[\left(\frac{4}{10}\right)^2 : \left(\frac{2}{5}\right)^{-2}\right] \cdot \left(\frac{4}{10}\right)^3\right\}^{-1} : 5^4 = \\ & = \left\{\left[\left(\frac{2}{5}\right)^2 : \left(\frac{2}{5}\right)^{-2}\right] \cdot \left(\frac{2}{5}\right)^3\right\}^{-1} : 5^4 = \\ & = \left\{\left(\frac{2}{5}\right)^4 \cdot \left(\frac{2}{5}\right)^3\right\}^{-1} : 5^4 = \\ & = \left\{\left(\frac{2}{5}\right)^7\right\}^{-1} : 5^4 = \\ & = \left(\frac{2}{5}\right)^{-7} : 5^4 = \\ & = \left(\frac{5}{2}\right)^7 \cdot \frac{1}{5^4} = \frac{5^3}{2^7} = \frac{125}{128}. \end{aligned} \quad (81)$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{9}{15} \right)^2 : \left(\frac{9}{15} \right)^{-1} \right] : \left(\frac{3}{5} \right)^2 \right\}^{-1} : \left(\frac{15}{2} \right)^{-1} = \\
& = \left\{ \left[\left(\frac{3}{5} \right)^2 : \left(\frac{3}{5} \right)^{-1} \right] : \left(\frac{3}{5} \right)^2 \right\}^{-1} : \left(\frac{15}{2} \right)^{-1} = \\
& = \left\{ \left[\left(\frac{3}{5} \right)^3 \right] : \left(\frac{3}{5} \right)^2 \right\}^{-1} : \frac{2}{15} = \\
& = \left\{ \left(\frac{3}{5} \right)^1 \right\}^{-1} : \frac{2}{15} = \\
& = \left\{ \frac{3}{5} \right\}^{-1} : \frac{2}{15} = \frac{5}{3} : \frac{2}{15} = \\
& = \frac{5}{3} \cdot \frac{15}{2} = \frac{5}{1} \cdot \frac{5}{2} = \frac{25}{2}.
\end{aligned} \tag{82}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{3}{2} \right)^4 : \left(\frac{3}{2} \right)^5 \right]^{-2} \cdot \left(\frac{4}{9} \right)^2 \right\} : \left(\frac{2}{3} \right)^{-1} = \\
& = \left\{ \left[\left(\frac{3}{2} \right)^4 : \left(\frac{3}{2} \right)^5 \right]^{-2} \cdot \left(\frac{4}{9} \right)^2 \right\} : \left(\frac{2}{3} \right)^{-1} = \\
& = \left\{ \left[\left(\frac{3}{2} \right)^{-1} \right]^{-2} \cdot \left(\frac{4}{9} \right)^2 \right\} : \left(\frac{2}{3} \right)^{-1} = \\
& = \left\{ \left(\frac{3}{2} \right)^2 \cdot \left(\frac{4}{9} \right)^2 \right\} : \left(\frac{2}{3} \right)^{-1} = \\
& = \left\{ \left(\frac{2}{3} \right)^2 \right\} : \left(\frac{2}{3} \right)^{-1} = \left(\frac{2}{3} \right)^3 = \frac{8}{27}.
\end{aligned} \tag{83}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{1}{4} \right)^3 \cdot \left(\frac{4}{6} \right)^3 \right]^{-1} \cdot \left(\frac{1}{6} \right)^4 \right\}^{-1} : \left[\left(\frac{1}{4} \right)^3 \cdot \left(\frac{10}{25} \right)^3 \right]^0 = \\
& = \left\{ \left[\left(\frac{1}{4} \right)^3 \cdot \left(\frac{2}{3} \right)^3 \right]^{-1} \cdot \left(\frac{1}{6} \right)^4 \right\}^{-1} : \left[\left(\frac{1}{4} \right)^3 \cdot \left(\frac{2}{5} \right)^3 \right]^0 = \\
& = \left\{ \left[\left(\frac{1}{6} \right)^3 \right]^{-1} \cdot \left(\frac{1}{6} \right)^4 \right\}^{-1} : 1 = \\
& = \left\{ \left(\frac{1}{6} \right)^{-3} \cdot \left(\frac{1}{6} \right)^4 \right\}^{-1} = \\
& = \left\{ \left(\frac{1}{6} \right)^1 \right\}^{-1} = \\
& = \left(\frac{1}{6} \right)^{-1} = 6^1 = 6.
\end{aligned} \tag{84}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{2}{10} \right)^{-2} \cdot 5^3 \right]^{-1} \cdot \left(\frac{3}{15} \right)^{-4} \right\}^2 : \left(\frac{4}{30} \right)^2 = \\
& = \left\{ \left[\left(\frac{1}{5} \right)^{-2} \cdot 5^3 \right]^{-1} \cdot \left(\frac{1}{5} \right)^{-4} \right\}^2 : \left(\frac{2}{15} \right)^2 = \\
& = \{ [5^2 \cdot 5^3]^{-1} \cdot 5^4 \}^2 : \left(\frac{2}{15} \right)^2 = \\
& = \{ [5^5]^{-1} \cdot 5^4 \}^2 : \left(\frac{2}{15} \right)^2 = \\
& = \{ 5^{-5} \cdot 5^4 \}^2 : \left(\frac{2}{15} \right)^2 = \\
& = \{ 5^{-1} \}^2 : \left(\frac{2}{15} \right)^2 = \\
& = 5^{-2} : \frac{4}{225} = \frac{1}{5^2} \cdot \frac{225}{4} = \frac{1}{25} \cdot \frac{225}{4} = \frac{9}{4}.
\end{aligned} \tag{85}$$

$$\begin{aligned}
& \left\{ [(3^2)^{-1}]^2 : \left(\frac{2}{6} \right)^{-3} \right\}^{-1} \cdot \left[\left(\frac{6}{15} \right)^2 \cdot \left(\frac{10}{12} \right)^2 \right] = \\
& = \left\{ [(3^2)^{-1}]^2 : \left(\frac{1}{3} \right)^{-3} \right\}^{-1} \cdot \left[\left(\frac{2}{5} \right)^2 \cdot \left(\frac{5}{6} \right)^2 \right] = \\
& = \{ [3^{-2}]^2 : 3^3 \}^{-1} \cdot \left(\frac{1}{3} \right)^2 = \\
& = \{ 3^{-4} : 3^3 \}^{-1} \cdot \left(\frac{1}{3} \right)^2 = \\
& = \{ 3^{-7} \}^{-1} \cdot \left(\frac{1}{3} \right)^2 = \\
& = 3^7 \cdot \frac{1}{3^2} = 3^5 = 243.
\end{aligned} \tag{86}$$

$$\begin{aligned}
& \left\{ \left[(3^2 : 3^{-3})^2 : 3^8 \right]^{-1} \cdot \left(\frac{4}{12} \right)^{-1} \right\}^2 \cdot \left\{ \left[\left(\frac{2}{5} \right)^2 \cdot \left(\frac{15}{2} \right)^2 \right] : \left(\frac{10}{4} \right)^2 \right\} = \\
& = \left\{ \left[(3^2 : 3^{-3})^2 : 3^8 \right]^{-1} \cdot \left(\frac{1}{3} \right)^{-1} \right\}^2 \cdot \left\{ \left[\left(\frac{2}{5} \right)^2 \cdot \left(\frac{15}{2} \right)^2 \right] : \left(\frac{5}{2} \right)^2 \right\} = \\
& = \left\{ \left[(3^5)^2 : 3^8 \right]^{-1} \cdot 3^1 \right\}^2 \cdot \left\{ 3^2 : \left(\frac{5}{2} \right)^2 \right\} = \\
& = \left\{ \left[3^{10} : 3^8 \right]^{-1} \cdot 3 \right\}^2 \cdot \left\{ 3^2 : \frac{25}{4} \right\} = \\
& = \left\{ \left[3^2 \right]^{-1} \cdot 3 \right\}^2 \cdot \left\{ 9 \cdot \frac{4}{25} \right\} = \\
& = \left\{ 3^{-2} \cdot 3 \right\}^2 \cdot \frac{36}{25} = \\
& = \left\{ 3^{-1} \right\}^2 \cdot \frac{36}{25} = \\
& = 3^{-2} \cdot \frac{36}{25} = \\
& = \frac{1}{3^2} \cdot \frac{36}{25} = \frac{1}{9} \cdot \frac{36}{25} = \frac{4}{25}.
\end{aligned} \tag{87}$$

$$\begin{aligned}
& \left[(-2)^{-2} + \left(\frac{2}{6} \right)^2 - \left(\frac{6}{2} \right)^{-2} + \frac{3}{36} \right]^3 : \left\{ -\frac{1}{2} - \left[4 : 2 - \left(\frac{3}{2} + \frac{2}{3} \right) \right] \right\}^2 + \frac{4}{3} = \\
& = \left[(-2)^{-2} + \left(\frac{1}{3} \right)^2 - \left(\frac{6}{2} \right)^{-2} + \frac{1}{12} \right]^3 : \left\{ -\frac{1}{2} - \left[2 - \left(\frac{3}{2} + \frac{2}{3} \right) \right] \right\}^2 + \frac{4}{3} = \\
& = \left[\left(-\frac{1}{2} \right)^2 + \left(\frac{1}{3} \right)^2 - (3)^{-2} + \frac{1}{12} \right]^3 : \left\{ -\frac{1}{2} - \left[2 - \left(\frac{9+4}{6} \right) \right] \right\}^2 + \frac{4}{3} = \\
& = \left[\left(\frac{1}{2} \right)^2 + \left(\frac{1}{3} \right)^2 - \left(\frac{1}{3} \right)^2 + \frac{1}{12} \right]^3 : \left\{ -\frac{1}{2} - \left[2 - \frac{13}{6} \right] \right\}^2 + \frac{4}{3} = \\
& = \left[\frac{1}{4} + \frac{1}{9} - \frac{1}{9} + \frac{1}{12} \right]^3 : \left\{ -\frac{1}{2} - \left[\frac{12-13}{6} \right] \right\}^2 + \frac{4}{3} = \\
& = \left[\frac{3+1}{12} \right]^3 : \left\{ -\frac{1}{2} - \left[-\frac{1}{6} \right] \right\}^2 + \frac{4}{3} = \\
& = \left[\frac{4}{12} \right]^3 : \left\{ -\frac{1}{2} + \frac{1}{6} \right\}^2 + \frac{4}{3} = \\
& = \left[\frac{1}{3} \right]^3 : \left\{ \frac{-3+1}{6} \right\}^2 + \frac{4}{3} = \frac{1}{27} : \left\{ -\frac{2}{6} \right\}^2 + \frac{4}{3} = \\
& = \frac{1}{27} : \left\{ \frac{1}{3} \right\}^2 + \frac{4}{3} = \frac{1}{27} : \frac{1}{9} + \frac{4}{3} = \frac{1}{27} \cdot 9 + \frac{4}{3} = \frac{9}{27} + \frac{4}{3} = \\
& = \frac{1}{3} + \frac{4}{3} = \frac{5}{3}.
\end{aligned} \tag{88}$$

$$\begin{aligned}
& \left(-\frac{5}{2}\right)^2 - \left\{ \left[\left(-\frac{4}{10}\right)^2 : \left(-\frac{4}{10}\right) + \left(-\frac{1}{2}\right)^2 \right] : \left(3^0 - \frac{7}{10}\right) - 6^0 + \frac{1}{2} \right\}^2 \cdot \left(-\frac{10}{4}\right)^{-2} - 2 = \\
& = \left(-\frac{5}{2}\right)^2 - \left\{ \left[\left(-\frac{2}{5}\right)^2 : \left(-\frac{2}{5}\right) + \left(-\frac{1}{2}\right)^2 \right] : \left(1 - \frac{7}{10}\right) - 1 + \frac{1}{2} \right\}^2 \cdot \left(-\frac{5}{2}\right)^{-2} - 2 = \\
& = \frac{25}{4} - \left\{ \left[\left(-\frac{2}{5}\right)^1 + \frac{1}{4} \right] : \left(\frac{10-7}{10}\right) - 1 + \frac{1}{2} \right\}^2 \cdot \left(-\frac{2}{5}\right)^2 - 2 = \\
& = \frac{25}{4} - \left\{ \left[-\frac{2}{5} + \frac{1}{4} \right] : \frac{3}{10} - 1 + \frac{1}{2} \right\}^2 \cdot \frac{4}{25} - 2 = \\
& = \frac{25}{4} - \left\{ \left[\frac{-8+5}{20} \right] : \frac{3}{10} - 1 + \frac{1}{2} \right\}^2 \cdot \frac{4}{25} - 2 = \\
& = \frac{25}{4} - \left\{ \left[-\frac{3}{20} \right] \cdot \frac{10}{3} - 1 + \frac{1}{2} \right\}^2 \cdot \frac{4}{25} - 2 = \\
& = \frac{25}{4} - \left\{ -\frac{1}{2} - 1 + \frac{1}{2} \right\}^2 \cdot \frac{4}{25} - 2 = \\
& = \frac{25}{4} - \{-1\}^2 \cdot \frac{4}{25} - 2 = \\
& = \frac{25}{4} - \{1\} \cdot \frac{4}{25} - 2 = \\
& = \frac{25}{4} - 1 \cdot \frac{4}{25} - 2 = \\
& = \frac{25}{4} - \frac{4}{25} - 2 = \\
& = \frac{625 - 16 - 200}{100} = \frac{409}{100}.
\end{aligned}$$

(89)

$$\begin{aligned}
& \left[\left(4^0 - \frac{1}{2}\right)^{-2} \cdot \left(2 \cdot 1 - \frac{1}{2}\right)^2 \right]^{-1} \cdot \left(\frac{3}{4}\right)^{-1} - 1 \cdot (-2)^2 \cdot \left(-\frac{1}{2} + \frac{2}{8}\right) - \\
& \quad + \left(-5^0 + \frac{1}{3}\right)^{-2} = \\
& = \left[\left(\frac{2-1}{2}\right)^{-2} \cdot \left(\frac{4-1}{2}\right)^2 \right]^{-1} \cdot \frac{4}{3} - 1 \cdot 4 \cdot \left(\frac{-2+1}{4}\right) - \left(\frac{-3+1}{3}\right)^{-2} = \\
& = \left[\left(\frac{1}{2}\right)^{-2} \cdot \left(\frac{3}{2}\right)^2 \right]^{-1} \cdot \frac{4}{3} - 4 \cdot \left(-\frac{1}{4}\right) - \left(-\frac{2}{3}\right)^{-2} = \tag{90} \\
& = \left[2^2 \cdot \frac{9}{4} \right]^{-1} \cdot \frac{4}{3} + 1 - \left(-\frac{3}{2}\right)^2 = \left[4 \cdot \frac{9}{4} \right]^{-1} \cdot \frac{4}{3} + 1 - \left(\frac{9}{4}\right) = \\
& = [9]^{-1} \cdot \frac{4}{3} + 1 - \frac{9}{4} = \left[\frac{1}{9}\right]^1 \cdot \frac{4}{3} + 1 - \frac{9}{4} = \frac{1}{9} \cdot \frac{4}{3} + 1 - \frac{9}{4} = \\
& = \frac{4}{27} + 1 - \frac{9}{4} = \frac{16 + 108 - 243}{108} = -\frac{119}{108}.
\end{aligned}$$

$$\begin{aligned}
& 4^0 - 2 + \left(\frac{3}{2} - 2\right)^2 : \left\{ -2 - \left[\frac{15}{9} - \left(2^0 + \frac{1}{3}\right)^2 \cdot \left(\frac{8}{9}\right)^{-1} \right] \right\} - \frac{2}{20} = \\
& = 1 - 2 + \left(\frac{3}{2} - 2\right)^2 : \left\{ -2 - \left[\frac{5}{3} - \left(1 + \frac{1}{3}\right)^2 \cdot \left(\frac{8}{9}\right)^{-1} \right] \right\} - \frac{1}{10} = \\
& = -1 + \left(\frac{3-4}{2}\right)^2 : \left\{ -2 - \left[\frac{5}{3} - \left(\frac{3+1}{3}\right)^2 \cdot \frac{9}{8} \right] \right\} - \frac{1}{10} = \\
& = -1 + \left(-\frac{1}{2}\right)^2 : \left\{ -2 - \left[\frac{5}{3} - \left(\frac{4}{3}\right)^2 \cdot \frac{9}{8} \right] \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -2 - \left[\frac{5}{3} - \frac{16}{9} \cdot \frac{9}{8} \right] \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -2 - \left[\frac{5}{3} - 2 \right] \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -2 - \left[\frac{5-6}{3} \right] \right\} - \frac{1}{10} = \tag{91} \\
& = -1 + \frac{1}{4} : \left\{ -2 - \left[-\frac{1}{3} \right] \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -2 + \frac{1}{3} \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ \frac{-6+1}{3} \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -\frac{5}{3} \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} \cdot \left\{ -\frac{3}{5} \right\} - \frac{1}{10} = \\
& = -1 - \frac{3}{20} - \frac{1}{10} = \frac{-20-3-2}{20} = -\frac{25}{20} = -\frac{5}{4}.
\end{aligned}$$

$$\begin{aligned}
& \left(-\frac{6}{4}\right)^{-3} + \left\{ \left[\left(-\frac{2}{3}\right)^3 : \frac{6}{9} + \left(\frac{1}{2}\right)^2 \right] : \left(3^0 - \frac{7}{6}\right) - 1 - \frac{1}{2} \right\}^3 \cdot \left(-\frac{1}{2}\right)^{-3} + 6^0 = \\
& = \left(-\frac{3}{2}\right)^{-3} + \left\{ \left[\left(-\frac{2}{3}\right)^3 : \frac{2}{3} + \left(\frac{1}{2}\right)^2 \right] : \left(1 - \frac{7}{6}\right) - 1 - \frac{1}{2} \right\}^3 \cdot \left(-\frac{1}{2}\right)^{-3} + 1 = \\
& = \left(-\frac{2}{3}\right)^3 + \left\{ \left[-\left(\frac{2}{3}\right)^2 + \frac{1}{4} \right] : \left(\frac{6-7}{6}\right) - 1 - \frac{1}{2} \right\}^3 \cdot (-2)^3 + 1 = \\
& = -\frac{8}{27} + \left\{ \left[-\frac{4}{9} + \frac{1}{4} \right] : \left(-\frac{1}{6}\right) - 1 - \frac{1}{2} \right\}^3 \cdot (-8) + 1 = \\
& = -\frac{8}{27} + \left\{ \left[\frac{-16+9}{36} \right] \cdot (-6) - 1 - \frac{1}{2} \right\}^3 \cdot (-8) + 1 = \\
& = -\frac{8}{27} + \left\{ -\frac{7}{36} \cdot (-6) - 1 - \frac{1}{2} \right\}^3 \cdot (-8) + 1 = \\
& = -\frac{8}{27} + \left\{ \frac{7}{6} - 1 - \frac{1}{2} \right\}^3 \cdot (-8) + 1 = \\
& = -\frac{8}{27} + \left\{ \frac{7-6-3}{6} \right\}^3 \cdot (-8) + 1 = \\
& = -\frac{8}{27} + \left\{ -\frac{2}{6} \right\}^3 \cdot (-8) + 1 = \\
& = -\frac{8}{27} + \left\{ -\frac{1}{3} \right\}^3 \cdot (-8) + 1 = \\
& = -\frac{8}{27} - \frac{1}{27} \cdot (-8) + 1 = -\frac{8}{27} + \frac{8}{27} + 1 = 1.
\end{aligned}$$

(92)

$$\begin{aligned}
& \left(\frac{1}{11} - \frac{2}{66} - \frac{1}{3}\right) \cdot \left\{ \left(-\frac{1}{3}\right)^{-2} - 15 - \left[2 \cdot 3^0 + \left(-\frac{5}{3}\right)^{-1} : \left(2^0 - \frac{1}{2} + 1 - \frac{3}{5}\right) \right] \right\} - \left(\frac{2}{3}\right)^0 = \\
& = \left(\frac{1}{11} - \frac{1}{33} - \frac{1}{3}\right) \cdot \left\{ \left(-\frac{1}{3}\right)^{-2} - 15 - \left[2 + \left(-\frac{5}{3}\right)^{-1} : \left(1 - \frac{1}{2} + 1 - \frac{3}{5}\right) \right] \right\} - 1 = \\
& = \left(\frac{3-1-11}{33}\right) \cdot \left\{ (-3)^2 - 15 - \left[2 + \left(-\frac{3}{5}\right) : \left(\frac{10-5+10-6}{10}\right) \right] \right\} - 1 = \\
& = \left(-\frac{9}{33}\right) \cdot \left\{ 9 - 15 - \left[2 + \left(-\frac{3}{5}\right) : \left(\frac{9}{10}\right) \right] \right\} - 1 = \\
& = \left(-\frac{3}{11}\right) \cdot \left\{ -6 - \left[2 - \frac{3}{5} \cdot \frac{10}{9} \right] \right\} - 1 = \\
& = \left(-\frac{3}{11}\right) \cdot \left\{ -6 - \left[2 - \frac{2}{3} \right] \right\} - 1 = \\
& = \left(-\frac{3}{11}\right) \cdot \left\{ -6 - \left[\frac{6-2}{3} \right] \right\} - 1 = \\
& = \left(-\frac{3}{11}\right) \cdot \left\{ -6 - \frac{4}{3} \right\} - 1 = \\
& = \left(-\frac{3}{11}\right) \cdot \left\{ \frac{-18-4}{3} \right\} - 1 = \\
& = \left(-\frac{3}{11}\right) \cdot \left\{ -\frac{22}{3} \right\} - 1 = \\
& = 2 - 1 = 1.
\end{aligned}$$

(93)

$$\begin{aligned}
& \left\{ \left[\left(2 - \frac{3}{2} + \frac{2}{5}\right) \cdot 10^{-1} + \frac{3}{50} \right] : \left(-\frac{10}{8}\right)^{-2} \right\} \cdot \left(2 \cdot 1 + \frac{2}{5} - \frac{21}{6} - 6^0 + \frac{1}{2}\right) + \frac{7}{5} = \\
& = \left\{ \left[\left(\frac{20-15+4}{10}\right) \cdot \frac{1}{10} + \frac{3}{50} \right] : \left(-\frac{4}{5}\right)^2 \right\} \cdot \left(\frac{20+4-35-10+5}{10}\right) + \frac{7}{5} = \\
& = \left\{ \left[\frac{9}{10} \cdot \frac{1}{10} + \frac{3}{50} \right] : \left(\frac{4}{5}\right)^2 \right\} \cdot \left(-\frac{16}{10}\right) + \frac{7}{5} = \\
& = \left\{ \left[\frac{9}{100} + \frac{3}{50} \right] : \left(\frac{4}{5}\right)^2 \right\} \cdot \left(-\frac{8}{5}\right) + \frac{7}{5} = \\
& = \left\{ \left[\frac{9+6}{100} \right] : \frac{16}{25} \right\} \cdot \left(-\frac{8}{5}\right) + \frac{7}{5} = \\
& = \left\{ \frac{15}{100} \cdot \frac{25}{16} \right\} \cdot \left(-\frac{8}{5}\right) + \frac{7}{5} = \\
& = \frac{15}{64} \cdot \left(-\frac{8}{5}\right) + \frac{7}{5} = \\
& = -\frac{3}{8} + \frac{7}{5} = \frac{-15+56}{20} = \frac{41}{20}.
\end{aligned}$$

(94)

$$\begin{aligned}
& \left(4^0 - \frac{5}{6} + \frac{8}{6}\right) \cdot \left\{ \left(1 - \frac{4}{9}\right) : \left[2 - \left(3^0 - \frac{1}{4} - \frac{11}{6}\right) \cdot \left(-\frac{13}{6}\right)^{-1} - 1 \right]^2 - \left(\frac{18}{46}\right)^{-1} \right\}^3 + \frac{1}{6} = \\
& = \left(1 - \frac{5}{6} + \frac{4}{3}\right) \cdot \left\{ \left(1 - \frac{4}{9}\right) : \left[2 - \left(1 - \frac{1}{4} - \frac{11}{6}\right) \cdot \left(-\frac{13}{6}\right)^{-1} - 1 \right]^2 - \left(\frac{9}{23}\right)^{-1} \right\}^3 + \frac{1}{6} = \\
& = \left(\frac{6-5+8}{6}\right) \cdot \left\{ \left(\frac{9-4}{9}\right) : \left[2 - \left(\frac{12-3-22}{12}\right) \cdot \left(-\frac{6}{13}\right) - 1 \right]^2 - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{9}{6} \cdot \left\{ \frac{5}{9} : \left[2 - \left(-\frac{13}{12}\right) \cdot \left(-\frac{6}{13}\right) - 1 \right]^2 - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ \frac{5}{9} : \left[2 - \left(+\frac{1}{2}\right) - 1 \right]^2 - \frac{23}{9} \right\}^3 + \frac{1}{6} = \frac{3}{2} \cdot \left\{ \frac{5}{9} : \left[2 - \frac{1}{2} - 1 \right]^2 - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ \frac{5}{9} : \left[1 - \frac{1}{2} \right]^2 - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ \frac{5}{9} : \left[\frac{2-1}{2} \right]^2 - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ \frac{5}{9} : \left[\frac{1}{2} \right]^2 - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ \frac{5}{9} : \frac{1}{4} - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ \frac{5}{9} \cdot 4 - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ \frac{20}{9} - \frac{23}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ -\frac{3}{9} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ -\frac{1}{3} \right\}^3 + \frac{1}{6} = \\
& = \frac{3}{2} \cdot \left\{ -\frac{1}{27} \right\} + \frac{1}{6} = \\
& = -\frac{1}{18} + \frac{1}{6} = \frac{-1+3}{18} = \frac{2}{18} = \frac{1}{9}.
\end{aligned}$$

(95)

$$\begin{aligned}
\left(2^1 - \frac{4}{5}\right)^2 &: \left\{ \left[\frac{1}{3} + 3^0 - \frac{1}{12} - \frac{13}{12} \cdot \left(-\frac{10}{18}\right)^{-1} \right] \cdot \left[\frac{3^2}{6} - \frac{(1-5)^2}{6} + \frac{(-2)^2}{6} \right] \right\} = \\
&= \left(\frac{10-4}{5}\right)^2 : \left\{ \left[\frac{1}{3} + 1 - \frac{1}{12} - \frac{13}{12} \cdot \left(-\frac{9}{5}\right) \right] \cdot \left[\frac{9}{6} - \frac{(-4)^2}{6} + \frac{4}{6} \right] \right\} = \\
&= \left(\frac{6}{5}\right)^2 : \left\{ \left[\frac{1}{3} + 1 - \frac{1}{12} + \frac{39}{20} \right] \cdot \left[\frac{3}{2} - \frac{16}{6} + \frac{4}{6} \right] \right\} = \\
&= \frac{36}{25} : \left\{ \left[\frac{20+60-5+117}{60} \right] \cdot \left[\frac{3}{2} - \frac{8}{3} + \frac{2}{3} \right] \right\} = \\
&= \frac{36}{25} : \left\{ \frac{192}{60} \cdot \left[\frac{3}{2} - \frac{6}{3} \right] \right\} = \\
&= \frac{36}{25} : \left\{ \frac{16}{5} \cdot \left[\frac{9-12}{6} \right] \right\} = \\
&= \frac{36}{25} : \left\{ \frac{16}{5} \cdot \left[-\frac{1}{2} \right] \right\} = \\
&= \frac{36}{25} : \left\{ -\frac{8}{5} \right\} = \\
&= \frac{36}{25} \cdot \left\{ -\frac{5}{8} \right\} = -\frac{9}{10}.
\end{aligned}$$

(96)

$$\begin{aligned}
\left[\frac{25^3}{75^2} - 2 \cdot \left(-\frac{10}{6}\right)^2 - \frac{21}{27} \right] &+ \left[\left(-\frac{16}{6}\right)^{-2} \cdot \left(\frac{8}{54}\right)^{-3} \right]^{-1} \cdot \left(-\frac{3}{2}\right)^{10} = \\
&= \left[\frac{25^3}{75^2} - 2 \cdot \left(-\frac{5}{3}\right)^2 - \frac{7}{9} \right] + \left[\left(-\frac{8}{3}\right)^{-2} \cdot \left(\frac{4}{27}\right)^{-3} \right]^{-1} \cdot \left(-\frac{3}{2}\right)^{10} = \\
&= \left[\frac{25^3}{75^2} - 2 \cdot \left(\frac{25}{9}\right) - \frac{7}{9} \right] + \left[\left(-\frac{3}{8}\right)^2 \cdot \left(\frac{27}{4}\right)^3 \right]^{-1} \cdot \left(\frac{3}{2}\right)^{10} = \\
&= \left[\frac{25^3}{75^2} - \frac{50}{9} - \frac{7}{9} \right] + \left[\frac{9}{64} \cdot \frac{27^3}{64} \right]^{-1} \cdot \left(\frac{3}{2}\right)^{10} = \\
&= \left[\frac{15625}{5625} - \frac{50}{9} - \frac{7}{9} \right] + \left[\frac{9}{64} \cdot \frac{19683}{64} \right]^{-1} \cdot \left(\frac{3}{2}\right)^{10} = \\
&= \left[\frac{25}{9} - \frac{50}{9} - \frac{7}{9} \right] + \left[\frac{177147}{4096} \right]^{-1} \cdot \left(\frac{3}{2}\right)^{10} = \\
&= -\frac{32}{9} + \frac{4096}{177147} \cdot \frac{59049}{1024} = \\
&= -\frac{32}{9} + \frac{4}{3} = \frac{-32+12}{9} = -\frac{20}{9}.
\end{aligned}$$

(97)

$$\begin{aligned}
& 3,5 \cdot 1 - \frac{4}{8} \cdot 1, \bar{9} = \\
& = 3,5 - \frac{1}{2} \cdot 1, \bar{9} = \\
& = \frac{35}{10} - \frac{1}{2} \cdot \frac{19-1}{9} = \\
& = \frac{7}{2} - \frac{1}{2} \cdot \frac{18}{9} = \\
& = \frac{7}{2} - \frac{1}{2} \cdot 2 = \frac{7}{2} - \frac{2}{2} = \\
& = \frac{7}{2} - 1 = \frac{7-2}{2} = \frac{5}{2}.
\end{aligned}
\tag{98}$$

$$\begin{aligned}
& (0, \bar{3} \cdot 1 + 0,35) : \frac{82}{40} + 0, \bar{1} = \\
& = (0, \bar{3} + 0,35) : \frac{41}{20} + 0, \bar{1} = \\
& = \left(\frac{3-0}{9} + \frac{35}{100} \right) : \frac{41}{20} + \frac{1-0}{9} = \\
& = \left(\frac{3}{9} + \frac{7}{20} \right) : \frac{41}{20} + \frac{1}{9} = \\
& = \left(\frac{1}{3} + \frac{7}{20} \right) \cdot \frac{20}{41} + \frac{1}{9} = \\
& = \frac{20+21}{60} \cdot \frac{20}{41} + \frac{1}{9} = \\
& = \frac{41}{60} \cdot \frac{20}{41} + \frac{1}{9} = \\
& = \frac{1}{30} + \frac{1}{9} = \\
& = \frac{1}{3} + \frac{1}{9} = \frac{3+1}{9} = \frac{4}{9}.
\end{aligned}
\tag{99}$$

$$\begin{aligned}
& 9,500 + (0,1)^2 : \left(\frac{14}{20} \right) = \\
& = 9,5 + (0,1)^2 : \left(\frac{7}{10} \right) = \\
& = \frac{95}{10} + \left(\frac{1}{10} \right)^2 : \left(\frac{7}{10} \right) = \\
& = \frac{19}{2} + \frac{1}{100} \cdot \frac{10}{7} = \\
& = \frac{19}{2} + \frac{1}{70} = \\
& = \frac{19}{2} + \frac{1}{70} = \\
& = \frac{665+1}{70} = \\
& = \frac{666}{70} = \frac{333}{35}.
\end{aligned}
\tag{100}$$

$$\begin{aligned}
& 0,8750 \cdot \left(7^1 + \frac{2}{7} - \frac{1}{14} + 6^1 - 17 + 1,5 \right) = \\
& = 0,875 \cdot \left(7 + \frac{2}{7} - \frac{1}{14} + 6 - 17 + 1,5 \right) = \\
& = \frac{875}{1000} \cdot \left(7 + \frac{2}{7} - \frac{1}{14} + 6 - 17 + \frac{15}{10} \right) = \\
& = \frac{7}{8} \cdot \left(\frac{490 + 20 - 5 + 420 - 1190 + 105}{70} \right) = \\
& = \frac{7}{8} \cdot \left(-\frac{16}{7} \right) = -2.
\end{aligned} \tag{101}$$

$$\begin{aligned}
& (2^1 \cdot 4,5)^2 + (-2)^3 \cdot (0,10)^{-1} + (2 \cdot 5 - 5,6) \cdot 2 = \\
& = (2 \cdot 4,5)^2 + (-2)^3 \cdot (0,1)^{-1} + (10 - 5,6) \cdot 2 = \\
& = \left(2 \cdot \frac{45}{10} \right)^2 - 8 \cdot \left(\frac{1}{10} \right)^{-1} + \left(10 - \frac{56}{10} \right) \cdot 2 = \\
& = \left(\frac{45}{5} \right)^2 - 8 \cdot (10)^1 + \left(10 - \frac{28}{5} \right) \cdot 2 = \\
& = 9^2 - 80 + \left(\frac{50 - 28}{5} \right) \cdot 2 = \\
& = 81 - 80 + \frac{22}{5} \cdot 2 = \\
& = 1 + \frac{44}{5} = \frac{5 + 44}{5} = \frac{49}{5} = 9,8.
\end{aligned} \tag{102}$$

$$\begin{aligned}
& \left[(0,250)^2 \cdot (0,\bar{6})^{3-1} \right]^2 : (0,1\bar{6})^3 - 2 + (1 + 3^0) = \\
& = \left[(0,25)^2 \cdot (0,\bar{6})^2 \right]^2 : (0,1\bar{6})^3 - 2 + 2 = \\
& = \left[\left(\frac{25}{100} \right)^2 \cdot \left(\frac{6-0}{9} \right)^2 \right]^2 : \left(\frac{16-1}{90} \right)^3 + 0 = \\
& = \left[\left(\frac{1}{4} \right)^2 \cdot \left(\frac{6}{9} \right)^2 \right]^2 : \left(\frac{15}{90} \right)^3 = \\
& = \left[\frac{1}{16} \cdot \left(\frac{2}{3} \right)^2 \right]^2 : \left(\frac{1}{6} \right)^3 = \\
& = \left[\frac{1}{16} \cdot \frac{4}{9} \right]^2 : \frac{1}{216} = \\
& = \left[\frac{4}{144} \right]^2 \cdot 216 = \\
& = \left[\frac{1}{36} \right]^2 \cdot 216 = \\
& = \frac{1}{1296} \cdot 216 = \frac{216}{1296} = \frac{1}{6}.
\end{aligned} \tag{103}$$

$$\begin{aligned}
& 0,1\bar{6} : \frac{150}{200} + 0,7 \cdot 1 = \\
& = 0,1\bar{6} : \frac{75}{100} + 0,7 = \\
& = \frac{16-1}{90} : \frac{75}{100} + \frac{7-0}{9} = \\
& = \frac{15}{90} : \frac{3}{4} + \frac{7}{9} = \\
& = \frac{1}{6} \cdot \frac{4}{3} + \frac{7}{9} = \\
& = \frac{2}{9} + \frac{7}{9} = \frac{9}{9} = 1.
\end{aligned} \tag{104}$$

$$\begin{aligned}
& \left[\left(0,1\bar{6} + \frac{6}{9} \right) : \left(\frac{8}{6} - 2 \cdot 1 \right) \right] \cdot \left[1,3 : \left(0,200 - \frac{6}{9} \right) \right] = \\
& = \left[\left(0,1\bar{6} + \frac{2}{3} \right) : \left(\frac{4}{3} - 2 \right) \right] \cdot \left[1,3 : \left(0,2 - \frac{2}{3} \right) \right] = \\
& = \left[\left(\frac{16-1}{90} + \frac{2}{3} \right) : \left(\frac{4-6}{3} \right) \right] \cdot \left[\frac{13-1}{9} : \left(\frac{2}{10} - \frac{2}{3} \right) \right] = \\
& = \left[\left(\frac{15}{90} + \frac{2}{3} \right) : \left(-\frac{2}{3} \right) \right] \cdot \left[\frac{12}{9} : \left(\frac{1}{5} - \frac{2}{3} \right) \right] = \\
& = \left[\left(\frac{1}{6} + \frac{2}{3} \right) \cdot \left(-\frac{3}{2} \right) \right] \cdot \left[\frac{4}{3} : \left(\frac{3-10}{15} \right) \right] = \\
& = \left[\left(\frac{1+4}{6} \right) \cdot \left(-\frac{3}{2} \right) \right] \cdot \left[\frac{4}{3} : \left(-\frac{7}{15} \right) \right] = \\
& = \left[-\frac{5}{4} \right] \cdot \left[\frac{4}{3} \cdot \left(-\frac{15}{7} \right) \right] = \\
& = -\frac{5}{4} \cdot \left(-\frac{20}{7} \right) = \frac{25}{7}.
\end{aligned} \tag{105}$$

$$\begin{aligned}
& 0,250 - \frac{14}{6} + 5^1 - 0,5 + \frac{5}{3} - 10 - 2 + 6 - \frac{10}{3} + \frac{5}{12} = \\
& = \frac{25}{100} - \frac{7}{3} - 1 - \frac{5}{10} + \frac{5}{3} - \frac{10}{3} + \frac{5}{12} = \\
& = \frac{1}{4} - \frac{7}{3} - 1 - \frac{1}{2} + \frac{5}{3} - \frac{10}{3} + \frac{5}{12} = \\
& = \frac{1}{4} - \frac{12}{3} - 1 - \frac{1}{2} + \frac{5}{12} = \\
& = \frac{1}{4} - 4 - 1 - \frac{1}{2} + \frac{5}{12} = \\
& = \frac{1}{4} - 5 - \frac{1}{2} + \frac{5}{12} = \\
& = \frac{3-60-6+5}{12} = -\frac{58}{12} = -\frac{29}{6}.
\end{aligned} \tag{106}$$

$$\begin{aligned}
& \left(3^1 - \frac{2}{8} + \frac{2}{3} - 6^0\right) - 3 + 1 + \left(3 - \frac{1}{2} + 1, \bar{6} - 1\right) - \left(\frac{8}{24} + \frac{2}{3} - \frac{2}{8}\right) - 0,8\bar{3} = \\
& = \left(3 - \frac{1}{4} + \frac{2}{3} - 1\right) - 2 + \left(3 - \frac{1}{2} + 1, \bar{6} - 1\right) - \left(\frac{1}{3} + \frac{2}{3} - \frac{1}{4}\right) - 0,8\bar{3} = \\
& = \left(\frac{36 - 3 + 8 - 12}{12}\right) - 2 + \left(3 - \frac{1}{2} + \frac{16 - 1}{9} - 1\right) - \left(\frac{4 + 8 - 3}{12}\right) - \frac{83 - 8}{90} = \\
& = \frac{29}{12} - 2 + \left(3 - \frac{1}{2} + \frac{15}{9} - 1\right) - \left(\frac{9}{12}\right) - \frac{75}{90} = \\
& = \frac{29}{12} - 2 + \left(3 - \frac{1}{2} + \frac{5}{3} - 1\right) - \left(\frac{3}{4}\right) - \frac{5}{6} = \\
& = \frac{29}{12} - 2 + \left(\frac{18 - 3 + 10 - 6}{6}\right) - \frac{3}{4} - \frac{5}{6} = \\
& = \frac{29}{12} - 2 + \frac{19}{6} - \frac{3}{4} - \frac{5}{6} = \\
& = \frac{29 - 24 + 38 - 9 - 10}{12} = \frac{24}{12} = 2.
\end{aligned}$$

(107)

$$\begin{aligned}
& \left(0,40 - \frac{3}{21}\right) - \left[\frac{4}{3} - 0,3 - \left(2^0 + \frac{8}{14}\right)\right] - \left(\frac{1}{5} + \frac{1}{7}\right) - 3 \cdot 2 + 3^1 = \\
& = \left(0,4 - \frac{1}{7}\right) - \left[\frac{4}{3} - 0,3 - \left(1 + \frac{4}{7}\right)\right] - \left(\frac{1}{5} + \frac{1}{7}\right) - 6 + 3 = \\
& = \left(\frac{4}{10} - \frac{1}{7}\right) - \left[\frac{4}{3} - \frac{3 - 0}{9} - \left(\frac{7 + 4}{7}\right)\right] - \left(\frac{7 + 5}{35}\right) - 3 = \\
& = \left(\frac{2}{5} - \frac{1}{7}\right) - \left[\frac{4}{3} - \frac{1}{3} - \frac{11}{7}\right] - \frac{12}{35} - 3 = \\
& = \left(\frac{14 - 5}{35}\right) - \left[\frac{3}{3} - \frac{11}{7}\right] - \frac{12}{35} - 3 = \\
& = \frac{9}{35} - \left[1 - \frac{11}{7}\right] - \frac{12}{35} - 3 = \\
& = \frac{9}{35} - \left[\frac{7 - 11}{7}\right] - \frac{12}{35} - 3 = \\
& = \frac{9}{35} - \left[-\frac{4}{7}\right] - \frac{12}{35} - 3 = \\
& = \frac{9}{35} + \frac{4}{7} - \frac{12}{35} - 3 = \\
& = \frac{9 + 20 - 12 - 105}{35} = -\frac{88}{35}.
\end{aligned}$$

(108)

$$\begin{aligned}
& [(1 \cdot 0, 2\bar{6})^3 : (0, 40)^{4-1}]^2 : \left(\frac{4}{6}\right)^4 = \\
& = [(0, 2\bar{6})^3 : (0, 4)^3]^2 : \left(\frac{2}{3}\right)^4 = \\
& = \left[\left(\frac{26-2}{90}\right)^3 : \left(\frac{4}{10}\right)^3\right]^2 : \left(\frac{2}{3}\right)^4 = \\
& = \left[\left(\frac{24}{90}\right)^3 : \left(\frac{2}{5}\right)^3\right]^2 : \left(\frac{2}{3}\right)^4 = \\
& = \left[\left(\frac{4}{15}\right)^3 : \left(\frac{2}{5}\right)^3\right]^2 : \left(\frac{2}{3}\right)^4 = \\
& = \left[\left(\frac{4}{15}\right)^3 \cdot \left(\frac{5}{2}\right)^3\right]^2 : \left(\frac{2}{3}\right)^4 = \\
& = \left(\frac{2}{3}\right)^6 : \left(\frac{2}{3}\right)^4 = \left(\frac{2}{3}\right)^2 = \frac{4}{9}.
\end{aligned} \tag{109}$$

$$\begin{aligned}
& \left[\left(\frac{4}{6} - \frac{4}{5}\right) : \left(\frac{4}{3} - 8^0\right)\right] : \left[\left(-\frac{12}{15}\right) : \left(\frac{10}{20} - \frac{2}{3}\right)\right] = \\
& = \left[\left(\frac{2}{3} - \frac{4}{5}\right) : \left(\frac{4}{3} - 1\right)\right] : \left[\left(-\frac{4}{5}\right) : \left(\frac{10}{20} - \frac{2}{3}\right)\right] = \\
& = \left[\left(\frac{10-12}{15}\right) : \left(\frac{4-3}{3}\right)\right] : \left[\left(-\frac{4}{5}\right) : \left(\frac{5}{10} - \frac{2}{3}\right)\right] = \\
& = \left[\left(\frac{10-12}{15}\right) : \left(\frac{1}{3}\right)\right] : \left[\left(-\frac{4}{5}\right) : \left(\frac{5}{10} - \frac{2}{3}\right)\right] = \\
& = \left[\left(-\frac{2}{15}\right) \cdot 3\right] : \left[\left(-\frac{4}{5}\right) : \left(\frac{1}{2} - \frac{2}{3}\right)\right] = \\
& = \left(-\frac{2}{5}\right) : \left[\left(-\frac{4}{5}\right) : \left(\frac{3-4}{6}\right)\right] = \\
& = \left(-\frac{2}{5}\right) : \left[\left(-\frac{4}{5}\right) : \left(-\frac{1}{6}\right)\right] = \\
& = \left(-\frac{2}{5}\right) : \left[\left(-\frac{4}{5}\right) \cdot (-6)\right] = \\
& = \left(-\frac{2}{5}\right) : \left(\frac{24}{5}\right) = \\
& = \left(-\frac{2}{5}\right) \cdot \left(\frac{5}{24}\right) = -\frac{1}{12}.
\end{aligned} \tag{110}$$

$$\begin{aligned}
& 0,6250 + \left(\frac{4}{6} - \frac{1}{4}\right) - \left[\frac{4}{8} - \left(\frac{1}{48} - \frac{3}{48}\right)\right] + \left(2^{2-1} - \frac{1}{24}\right) + \frac{5}{24} = \\
& = 0,625 + \left(\frac{2}{3} - \frac{1}{4}\right) - \left[\frac{1}{2} - \left(\frac{1}{48} - \frac{1}{16}\right)\right] + \left(2 - \frac{1}{24}\right) + \frac{5}{24} = \\
& = \frac{625}{1000} + \left(\frac{8-3}{12}\right) - \left[\frac{1}{2} - \left(\frac{1-3}{48}\right)\right] + \left(\frac{48-1}{24}\right) + \frac{5}{24} = \\
& = \frac{5}{8} + \frac{5}{12} - \left[\frac{1}{2} - \left(-\frac{1}{24}\right)\right] + \left(\frac{47}{24}\right) + \frac{5}{24} = \\
& = \frac{5}{8} + \frac{5}{12} - \left[\frac{1}{2} + \frac{1}{24}\right] + \left(\frac{47}{24}\right) + \frac{5}{24} = \\
& = \frac{5}{8} + \frac{5}{12} - \left[\frac{12+1}{24}\right] + \frac{47}{24} + \frac{5}{24} = \\
& = \frac{5}{8} + \frac{5}{12} - \frac{13}{24} + \frac{47}{24} + \frac{5}{24} = \\
& = \frac{5}{8} + \frac{5}{12} + \frac{39}{24} = \frac{15+10+39}{24} = \frac{64}{24} = \frac{8}{3}.
\end{aligned} \tag{111}$$

$$\begin{aligned}
& \frac{2}{3} - 0,2500 + \frac{6}{36} - \left[\frac{1}{4} - \left(\frac{3}{6} + \frac{3}{4}\right)\right] + \left[-\frac{1}{6} + \left(\frac{2}{3} - \frac{12}{16}\right) - \frac{1}{12}\right] - 0^4 = \\
& = \frac{2}{3} - 0,25 + \frac{2}{12} - \left[\frac{1}{4} - \left(\frac{1}{2} + \frac{3}{4}\right)\right] + \left[-\frac{1}{6} + \left(\frac{2}{3} - \frac{3}{4}\right) - \frac{1}{12}\right] = \\
& = \frac{2}{3} - \frac{25}{100} + \frac{1}{6} - \left[\frac{1}{4} - \left(\frac{2+3}{4}\right)\right] + \left[-\frac{1}{6} + \left(\frac{8-9}{12}\right) - \frac{1}{12}\right] = \\
& = \frac{2}{3} - \frac{1}{4} + \frac{1}{6} - \left[\frac{1}{4} - \frac{5}{4}\right] + \left[-\frac{1}{6} - \frac{1}{12} - \frac{1}{12}\right] = \\
& = \frac{2}{3} - \frac{1}{4} + \frac{1}{6} - \left[-\frac{4}{4}\right] + \left[-\frac{1}{6} - \frac{2}{12}\right] = \\
& = \frac{2}{3} - \frac{1}{4} + \frac{1}{6} + 1 + \left[-\frac{1}{6} - \frac{1}{6}\right] = \\
& = \frac{2}{3} - \frac{1}{4} + \frac{1}{6} + 1 + \left[-\frac{2}{6}\right] = \\
& = \frac{2}{3} - \frac{1}{4} + \frac{1}{6} + 1 - \frac{1}{3} = \\
& = \frac{1}{3} - \frac{1}{4} + \frac{1}{6} + 1 = \\
& = \frac{4-3+2+12}{12} = \frac{15}{12} = \frac{5}{4}.
\end{aligned} \tag{112}$$

$$\begin{aligned}
5^1 + \frac{6}{8} - 5 - \frac{2}{3} + 0,1250 - \left[5 - \left(\frac{2}{3} + 4^1 - \frac{1}{6} \right) \right] + \left[2 - \left(\frac{2}{16} + \frac{4}{3} + 3^0 \right) \right] &= \\
= \frac{3}{4} - \frac{2}{3} + 0,125 - \left[5 - \left(\frac{2}{3} + 4 - \frac{1}{6} \right) \right] + \left[2 - \left(\frac{1}{8} + \frac{4}{3} + 1 \right) \right] &= \\
= \frac{3}{4} - \frac{2}{3} + \frac{125}{1000} - \left[5 - \left(\frac{4+24-1}{6} \right) \right] + \left[2 - \left(\frac{3+32+24}{24} \right) \right] &= \\
= \frac{3}{4} - \frac{2}{3} + \frac{1}{8} - \left[5 - \frac{9}{2} \right] + \left[2 - \frac{59}{24} \right] &= \\
= \frac{3}{4} - \frac{2}{3} + \frac{1}{8} - \left[\frac{10-9}{2} \right] + \left[\frac{48-59}{24} \right] &= \\
= \frac{3}{4} - \frac{2}{3} + \frac{1}{8} - \frac{1}{2} - \frac{11}{24} &= \\
= \frac{18-16+3-12-11}{24} = -\frac{18}{24} = -\frac{3}{4}. &
\end{aligned}$$

(113)

$$\begin{aligned}
0^3 + \left\{ \left[(0,80)^3 \cdot (0,\bar{5})^{4-1} \right] \cdot (0,6)^6 \right\} \cdot 5^{2-2} &= \\
= 0 + \left\{ \left[(0,8)^3 \cdot (0,\bar{5})^3 \right] \cdot (0,6)^6 \right\} \cdot 5^4 &= \\
= \left\{ \left[\left(\frac{8}{10} \right)^3 \cdot \left(\frac{5-0}{9} \right)^3 \right] \cdot \left(\frac{6}{10} \right)^6 \right\} \cdot 5^4 &= \\
= \left\{ \left[\left(\frac{4}{5} \right)^3 \cdot \left(\frac{5}{9} \right)^3 \right] \cdot \left(\frac{3}{5} \right)^6 \right\} \cdot 5^4 &= \\
= \left\{ \left[\left(\frac{20}{45} \right)^3 \right] \cdot \left(\frac{3}{5} \right)^6 \right\} \cdot 5^4 &= \\
= \left\{ \left[\left(\frac{4}{9} \right)^3 \right] \cdot \left(\frac{3}{5} \right)^6 \right\} \cdot 5^4 &= \\
= \left\{ \left[\left(\frac{2}{3} \right)^2 \right]^3 \cdot \left(\frac{3}{5} \right)^6 \right\} \cdot 5^4 &= \\
= \left\{ \left(\frac{2}{3} \right)^6 \cdot \left(\frac{3}{5} \right)^6 \right\} \cdot 5^4 &= \\
= \left\{ \left(\frac{6}{15} \right)^6 \right\} \cdot 5^4 &= \\
= \left\{ \left(\frac{2}{5} \right)^6 \right\} \cdot 5^4 &= \\
= \left(\frac{2}{5} \right)^6 \cdot 5^4 &= \\
= \frac{2^6}{5^2} = \frac{64}{25}. &
\end{aligned}$$

(114)

$$\begin{aligned}
& \left(\frac{8}{20} \cdot 1\right) + \left(\frac{1}{5} - 2, \bar{3}\right) \cdot \left(\frac{6}{8} - \frac{2}{3}\right) \cdot 11,25 - \frac{4}{6} = \\
& = \frac{4}{10} + \left(\frac{1}{5} - 2, \bar{3}\right) \cdot \left(\frac{3}{4} - \frac{2}{3}\right) \cdot 11,25 - \frac{2}{3} = \\
& = \frac{4}{10} + \left(\frac{1}{5} - \frac{23-2}{9}\right) \cdot \left(\frac{9-8}{12}\right) \cdot \frac{1125}{100} - \frac{2}{3} = \\
& = \frac{2}{5} + \left(\frac{1}{5} - \frac{21}{9}\right) \cdot \left(\frac{1}{12}\right) \cdot \frac{45}{4} - \frac{2}{3} = \\
& = \frac{2}{5} + \left(\frac{9-105}{45}\right) \cdot \frac{1}{12} \cdot \frac{45}{4} - \frac{2}{3} = \\
& = \frac{2}{5} - \frac{96}{45} \cdot \frac{1}{12} \cdot \frac{45}{4} - \frac{2}{3} = \\
& = \frac{2}{5} - \frac{8}{45} \cdot \frac{45}{4} - \frac{2}{3} = \\
& = \frac{2}{5} - 2 - \frac{2}{3} = \frac{6-30-10}{15} = -\frac{34}{15}.
\end{aligned} \tag{115}$$

$$\begin{aligned}
& \frac{13}{2} - \frac{30}{9} \cdot \left(\frac{11}{4} + \frac{3}{8} - \frac{4}{2} + \frac{3}{2}\right) \cdot \left(\frac{1}{2} + \frac{3}{2} + \frac{4}{5}\right) + 7 + 3 + (10 \cdot 1 + 3) = \\
& = \frac{13}{2} - \frac{10}{3} \cdot \left(\frac{11}{4} + \frac{3}{8} - \frac{1}{2}\right) \cdot \left(\frac{1}{2} + \frac{3}{2} + \frac{4}{5}\right) + 10 + (10 + 3) = \\
& = \frac{13}{2} - \frac{10}{3} \cdot \left(\frac{22+3-4}{8}\right) \cdot \left(\frac{4}{2} + \frac{4}{5}\right) + 10 + 13 = \\
& = \frac{13}{2} - \frac{10}{3} \cdot \frac{21}{8} \cdot \left(2 + \frac{4}{5}\right) + 23 = \\
& = \frac{13}{2} - \frac{10}{3} \cdot \frac{21}{8} \cdot \left(\frac{10+4}{5}\right) + 23 = \\
& = \frac{13}{2} - \frac{49}{2} + 23 = -\frac{36}{2} + 23 = -18 + 23 = 5.
\end{aligned} \tag{116}$$

$$\begin{aligned}
& \left\{ \left[2^3 : \left(\frac{4}{8}\right)^{3-1} \right] : 2^3 \right\}^{-1} \cdot \left\{ \left[\left(\frac{3}{2}\right)^3 : \left(\frac{3}{2}\right)^{1-1} \right] \cdot \left(\frac{24}{21}\right)^2 \right\} = \\
& = \left\{ \left[2^3 : \left(\frac{1}{2}\right)^2 \right] : 2^3 \right\}^{-1} \cdot \left\{ \left[\left(\frac{3}{2}\right)^3 : \left(\frac{3}{2}\right)^1 \right] \cdot \left(\frac{8}{7}\right)^2 \right\} = \\
& = \left\{ \left[2^3 : 2^{-2} \right] : 2^3 \right\}^{-1} \cdot \left\{ \left[\left(\frac{3}{2}\right)^2 \right] \cdot \left(\frac{8}{7}\right)^2 \right\} = \\
& = \left\{ 2^5 : 2^3 \right\}^{-1} \cdot \left\{ \frac{9}{4} \cdot \left(\frac{8}{7}\right)^2 \right\} = \\
& = \left\{ 2^2 \right\}^{-1} \cdot \left\{ \frac{9}{4} \cdot \frac{64}{49} \right\} = \\
& = \{4\}^{-1} \cdot \left\{ 9 \cdot \frac{16}{49} \right\} = \\
& = \frac{1}{4} \cdot \left\{ \frac{144}{49} \right\} = \frac{36}{49}.
\end{aligned} \tag{117}$$

$$\begin{aligned}
& \left[\frac{10}{3} + \left(\frac{4}{8} + \frac{8}{3} - \frac{14}{6} \right) \cdot \left(\frac{3}{2} - \frac{8}{5} - \frac{9}{6} \right) - \frac{7}{3} \right] \cdot \frac{24}{32} - 0,08\bar{3} + \frac{2}{3} = \\
& = \left[\frac{10}{3} + \left(\frac{1}{2} + \frac{8}{3} - \frac{7}{3} \right) \cdot \left(\frac{3}{2} - \frac{8}{5} - \frac{3}{2} \right) - \frac{7}{3} \right] \cdot \frac{3}{4} - 0,08\bar{3} + \frac{2}{3} = \\
& = \left[\frac{10}{3} + \left(\frac{1}{2} + \frac{1}{3} \right) \cdot \left(-\frac{8}{5} \right) - \frac{7}{3} \right] \cdot \frac{3}{4} - \frac{83-8}{900} + \frac{2}{3} = \\
& = \left[\frac{10}{3} + \left(\frac{3+2}{6} \right) \cdot \left(-\frac{8}{5} \right) - \frac{7}{3} \right] \cdot \frac{3}{4} - \frac{75}{900} + \frac{2}{3} = \\
& = \left[\frac{10}{3} + \frac{5}{6} \cdot \left(-\frac{8}{5} \right) - \frac{7}{3} \right] \cdot \frac{3}{4} - \frac{1}{12} + \frac{2}{3} = \\
& = \left[\frac{10}{3} - \frac{4}{3} - \frac{7}{3} \right] \cdot \frac{3}{4} - \frac{1}{12} + \frac{2}{3} = \\
& = -\frac{1}{3} \cdot \frac{3}{4} - \frac{1}{12} + \frac{2}{3} = \\
& = -\frac{1}{4} - \frac{1}{12} + \frac{2}{3} = \\
& = \frac{-3-1+8}{12} = \frac{4}{12} = \frac{1}{3}.
\end{aligned} \tag{118}$$

$$\begin{aligned}
& \left\{ \left[5^2 \cdot \left(\frac{4}{30} \right)^2 \right]^{-2} \cdot \left(\frac{6}{4} \right)^{-2} \right\}^{-1} : \left[\left(\frac{4}{5} \right)^{-1} \cdot \left(\frac{20}{18} \right)^{-1} \right]^{-2} = \\
& = \left\{ \left[5^2 \cdot \left(\frac{2}{15} \right)^2 \right]^{-2} \cdot \left(\frac{3}{2} \right)^{-2} \right\}^{-1} : \left[\left(\frac{4}{5} \right)^{-1} \cdot \left(\frac{10}{9} \right)^{-1} \right]^{-2} = \\
& = \left\{ \left[25 \cdot \frac{4}{225} \right]^{-2} \cdot \left(\frac{2}{3} \right)^2 \right\}^{-1} : \left[\frac{5}{4} \cdot \frac{9}{10} \right]^{-2} = \\
& = \left\{ \left[\frac{4}{9} \right]^{-2} \cdot \frac{4}{9} \right\}^{-1} : \left[\frac{9}{8} \right]^{-2} = \\
& = \left\{ \left[\frac{4}{9} \right]^{-1} \right\}^{-1} : \left[\frac{8}{9} \right]^2 = \\
& = \frac{4}{9} \cdot \left[\frac{9}{8} \right]^2 = \frac{4}{9} \cdot \frac{81}{64} = \frac{9}{16}.
\end{aligned} \tag{119}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{4}{10} - \frac{1}{3} \right) \cdot \left(\frac{8}{6} - 3^1 \right) + \left(\frac{8}{20} - \frac{2}{3} \right) \cdot \left(\frac{1}{2} - \frac{8}{6} \right) \right] \cdot (8-5) \right\} \cdot \frac{2}{4} - \frac{1}{12} + 1 = \\
& = \left\{ \left[\left(\frac{2}{5} - \frac{1}{3} \right) \cdot \left(\frac{4}{3} - 3 \right) + \left(\frac{2}{5} - \frac{2}{3} \right) \cdot \left(\frac{1}{2} - \frac{4}{3} \right) \right] \cdot 3 \right\} \cdot \frac{2}{4} - \frac{1}{12} + 1 = \\
& = \left\{ \left[\left(\frac{6-5}{15} \right) \cdot \left(\frac{4-9}{3} \right) + \left(\frac{6-10}{15} \right) \cdot \left(\frac{3-8}{6} \right) \right] \cdot 3 \right\} \cdot \frac{1}{2} - \frac{1}{12} + 1 = \\
& = \left\{ \left[\frac{1}{15} \cdot \left(-\frac{5}{3} \right) + \left(-\frac{4}{15} \right) \cdot \left(-\frac{5}{6} \right) \right] \cdot 3 \right\} \cdot \frac{1}{2} - \frac{1}{12} + 1 = \\
& = \left\{ \left[-\frac{1}{9} + \frac{2}{9} \right] \cdot 3 \right\} \cdot \frac{1}{2} - \frac{1}{12} + 1 = \\
& = \left\{ \left[\frac{1}{9} \right] \cdot 3 \right\} \cdot \frac{1}{2} - \frac{1}{12} + 1 = \\
& = \frac{1}{3} \cdot \frac{1}{2} - \frac{1}{12} + 1 = \\
& = \frac{1}{6} - \frac{1}{12} + 1 = \\
& = \frac{2-1+12}{12} = \frac{13}{12}.
\end{aligned}$$

(120)

$$\begin{aligned}
& \left\{ \left[\left(\frac{6}{12} - \frac{3}{5} \right) : \left(\frac{1}{5} - \frac{6}{9} \right) - \left(\frac{2}{14} - \frac{1}{5} \right) : \left(\frac{2}{3} - \frac{4}{7} \right) \right] \right\} \cdot \frac{7}{3} - 8^0 \cdot 2^1 - \frac{8}{10} = \\
& = \left\{ \left[\left(\frac{2}{4} - \frac{3}{5} \right) : \left(\frac{1}{5} - \frac{2}{3} \right) - \left(\frac{1}{7} - \frac{1}{5} \right) : \left(\frac{2}{3} - \frac{4}{7} \right) \right] \right\} \cdot \frac{7}{3} - 1 \cdot 2 - \frac{4}{5} = \\
& = \left\{ \left[\left(\frac{10-12}{20} \right) : \left(\frac{3-10}{15} \right) - \left(\frac{5-7}{35} \right) : \left(\frac{14-12}{21} \right) \right] \right\} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \left\{ \left[\left(-\frac{2}{20} \right) : \left(-\frac{7}{15} \right) - \left(-\frac{2}{35} \right) : \left(\frac{2}{21} \right) \right] \right\} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \left\{ \left[\left(-\frac{1}{10} \right) : \left(-\frac{7}{15} \right) - \left(-\frac{2}{35} \right) \cdot \left(\frac{21}{2} \right) \right] \right\} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \left\{ \left[\left(-\frac{1}{10} \right) \cdot \left(-\frac{15}{7} \right) - \left(-\frac{1}{5} \right) \cdot \left(\frac{3}{1} \right) \right] \right\} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \left\{ \left[\left(-\frac{1}{2} \right) \cdot \left(-\frac{3}{7} \right) - \left(-\frac{3}{5} \right) \right] \right\} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \left\{ \left[\frac{3}{14} + \frac{3}{5} \right] \right\} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \left\{ \left[\frac{15+42}{70} \right] \right\} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \left\{ \left[\frac{57}{70} \right] \right\} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \frac{57}{70} \cdot \frac{7}{3} - 2 - \frac{4}{5} = \\
& = \frac{19}{10} - 2 - \frac{4}{5} = \\
& = \frac{19-20-8}{10} = -\frac{9}{10}.
\end{aligned}$$

(121)

$$\begin{aligned}
& \frac{2}{12} + \left(\frac{2}{5}\right)^{3-1} : \frac{8}{35} - 1,85 + 1,100 + \left(\frac{2}{5} + 0,1 + \frac{4}{12}\right)^3 : (1,\overline{6})^2 = \\
& = \frac{1}{6} + \left(\frac{2}{5}\right)^2 : \frac{8}{35} - 0,75 + \left(\frac{2}{5} + 0,1 + \frac{1}{3}\right)^3 : (1,\overline{6})^2 = \\
& = \frac{1}{6} + \frac{4}{25} : \frac{8}{35} - \frac{75}{100} + \left(\frac{2}{5} + \frac{1}{10} + \frac{1}{3}\right)^3 : \left(\frac{16-1}{9}\right)^2 = \\
& = \frac{1}{6} + \frac{4}{25} \cdot \frac{35}{8} - \frac{75}{100} + \left(\frac{12+3+10}{30}\right)^3 : \left(\frac{15}{9}\right)^2 = \\
& = \frac{1}{6} + \frac{7}{10} - \frac{3}{4} + \left(\frac{25}{30}\right)^3 : \left(\frac{15}{9}\right)^2 \tag{122} \\
& = \frac{1}{6} + \frac{7}{10} - \frac{3}{4} + \frac{125}{216} : \frac{225}{81} = \\
& = \frac{1}{6} + \frac{7}{10} - \frac{3}{4} + \frac{125}{216} \cdot \frac{81}{225} = \\
& = \frac{1}{6} + \frac{7}{10} - \frac{3}{4} + \frac{5}{24} = \\
& = \frac{20+84-90+25}{120} = \frac{39}{120} = \frac{13}{40}.
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{3}{21} - \frac{8}{16} \right) \cdot \left(2 + 1 + \frac{3}{6} \right) \right] \cdot \frac{8}{6} - \frac{2}{3} \right\} \cdot \frac{3}{2} + 5^0 - \frac{6}{8} = \\
& = \left\{ \left[\left(\frac{1}{7} - \frac{2}{4} \right) \cdot \left(3 + \frac{1}{2} \right) \right] \cdot \frac{4}{3} - \frac{2}{3} \right\} \cdot \frac{3}{2} + 1 - \frac{3}{4} = \\
& = \left\{ \left[\left(\frac{4-14}{28} \right) \cdot \left(\frac{6+1}{2} \right) \right] \cdot \frac{4}{3} - \frac{2}{3} \right\} \cdot \frac{3}{2} + 1 - \frac{3}{4} = \\
& = \left\{ \left[\left(-\frac{5}{14} \right) \cdot \frac{7}{2} \right] \cdot \frac{4}{3} - \frac{2}{3} \right\} \cdot \frac{3}{2} + 1 - \frac{3}{4} = \\
& = \left\{ -\frac{5}{4} \cdot \frac{4}{3} - \frac{2}{3} \right\} \cdot \frac{3}{2} + 1 - \frac{3}{4} = \\
& = \left\{ -\frac{5}{3} - \frac{2}{3} \right\} \cdot \frac{3}{2} + 1 - \frac{3}{4} = \\
& = -\frac{7}{3} \cdot \frac{3}{2} + 1 - \frac{3}{4} = \\
& = -\frac{7}{2} + 1 - \frac{3}{4} = \frac{-14+4-3}{4} = -\frac{13}{4}. \tag{123}
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[\frac{12}{15} \cdot \left(-\frac{5}{2} + \frac{2}{8} \right) - \frac{3}{5} \right] : \frac{6}{10} + 2 \right\} : 3^1 - \frac{1}{12} + 8 - 6^1 = \\
& = \left\{ \left[\frac{4}{5} \cdot \left(-\frac{5}{2} + \frac{1}{4} \right) - \frac{3}{5} \right] : \frac{3}{5} + 2 \right\} : 3 - \frac{1}{12} + 2 = \\
& = \left\{ \left[\frac{4}{5} \cdot \left(\frac{-10+1}{4} \right) - \frac{3}{5} \right] : \frac{5}{3} + 2 \right\} \cdot \frac{1}{3} - \frac{1}{12} + 2 = \\
& = \left\{ \left[\frac{4}{5} \cdot \left(-\frac{9}{4} \right) - \frac{3}{5} \right] : \frac{5}{3} + 2 \right\} \cdot \frac{1}{3} - \frac{1}{12} + 2 = \\
& = \left\{ \left[-\frac{9}{5} - \frac{3}{5} \right] : \frac{5}{3} + 2 \right\} \cdot \frac{1}{3} - \frac{1}{12} + 2 = \\
& = \left\{ -\frac{12}{5} : \frac{5}{3} + 2 \right\} \cdot \frac{1}{3} - \frac{1}{12} + 2 = \\
& = \{-4 + 2\} \cdot \frac{1}{3} - \frac{1}{12} + 2 = \\
& = -2 \cdot \frac{1}{3} - \frac{1}{12} + 2 = \\
& = -\frac{2}{3} - \frac{1}{12} + 2 = \frac{-8-1+24}{12} = \frac{15}{12} = \frac{5}{4}.
\end{aligned} \tag{124}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{4}{3} - \frac{1}{6} \right) : \left(\frac{22}{36} - 7^0 \right) + 6 - 4 - \frac{3}{4} \right] : \frac{7}{14} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{4}{60} + 2 = \\
& = \left\{ \left[\left(\frac{4}{3} - \frac{1}{6} \right) : \left(\frac{11}{18} - 1 \right) + 2 - \frac{3}{4} \right] : \frac{1}{2} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ \left[\left(\frac{8-1}{6} \right) : \left(\frac{11-18}{18} \right) + 2 - \frac{3}{4} \right] : 2 - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ \left[\left(\frac{7}{6} \right) : \left(-\frac{7}{18} \right) + 2 - \frac{3}{4} \right] : 2 - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ \left[\left(\frac{7}{6} \right) \cdot \left(-\frac{18}{7} \right) + 2 - \frac{3}{4} \right] : 2 - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ \left[-3 + 2 - \frac{3}{4} \right] : 2 - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ \left[-1 - \frac{3}{4} \right] : 2 - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ \left[\frac{-4-3}{4} \right] : 2 - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ -\frac{7}{4} : 2 - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ -\frac{7}{2} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = \left\{ \frac{-21-4}{6} \right\} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = -\frac{25}{6} \cdot \frac{3}{5} - \frac{1}{15} + 2 = \\
& = -\frac{5}{2} - \frac{1}{15} + 2 = \\
& = \frac{-75-2+60}{30} = -\frac{17}{30}.
\end{aligned} \tag{125}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{4}{6} - \frac{6}{16} \right) : \left(\frac{2}{3} - \frac{9}{12} \right) - \frac{5}{4} \right] \cdot 2^1 + \frac{3}{2} \right\} : \left(-\frac{8}{3} \right) - 0,50 - \left(\frac{1}{16} + 1,8750 \right) = \\
& = \left\{ \left[\left(\frac{2}{3} - \frac{3}{8} \right) : \left(\frac{2}{3} - \frac{3}{4} \right) - \frac{5}{4} \right] \cdot 2^1 + \frac{3}{2} \right\} : \left(-\frac{8}{3} \right) - 0,5 - \left(\frac{1}{16} + 1,875 \right) = \\
& = \left\{ \left[\left(\frac{16-9}{24} \right) : \left(\frac{8-9}{12} \right) - \frac{5}{4} \right] \cdot 2 + \frac{3}{2} \right\} \cdot \left(-\frac{3}{8} \right) - \frac{5}{10} - \left(\frac{1}{16} + \frac{1875}{1000} \right) = \\
& = \left\{ \left[\left(\frac{7}{24} \right) : \left(-\frac{1}{12} \right) - \frac{5}{4} \right] \cdot 2 + \frac{3}{2} \right\} \cdot \left(-\frac{3}{8} \right) - \frac{1}{2} - \left(\frac{1}{16} + \frac{15}{8} \right) = \\
& = \left\{ \left[\frac{7}{24} \cdot (-12) - \frac{5}{4} \right] \cdot 2 + \frac{3}{2} \right\} \cdot \left(-\frac{3}{8} \right) - \frac{1}{2} - \left(\frac{1}{16} + \frac{15}{8} \right) = \\
& = \left\{ \left[-\frac{7}{2} - \frac{5}{4} \right] \cdot 2 + \frac{3}{2} \right\} \cdot \left(-\frac{3}{8} \right) - \frac{1}{2} - \left(\frac{1}{16} + \frac{15}{8} \right) = \\
& = \left\{ \left[\frac{-14-5}{4} \right] \cdot 2 + \frac{3}{2} \right\} \cdot \left(-\frac{3}{8} \right) - \frac{1}{2} - \left(\frac{1}{16} + \frac{15}{8} \right) = \\
& = \left\{ \left[-\frac{19}{4} \right] \cdot 2 + \frac{3}{2} \right\} \cdot \left(-\frac{3}{8} \right) - \frac{1}{2} - \left(\frac{1}{16} + \frac{15}{8} \right) = \\
& = \left\{ -\frac{19}{2} + \frac{3}{2} \right\} \cdot \left(-\frac{3}{8} \right) - \frac{1}{2} - \left(\frac{1}{16} + \frac{15}{8} \right) = \\
& = -8 \cdot \left(-\frac{3}{8} \right) - \frac{1}{2} - \left(\frac{1}{16} + \frac{15}{8} \right) = \\
& = 3 - \frac{1}{2} - \left(\frac{1}{16} + \frac{15}{8} \right) = \\
& = 3 - \frac{1}{2} - \frac{1}{16} - \frac{15}{8} = \\
& = \frac{48-8-1-30}{16} = \frac{9}{16}.
\end{aligned}$$

(126)

$$\begin{aligned}
3^0 - \left\{ \frac{8}{6} \cdot \left[\frac{1}{5} \cdot \left(2^1 - \frac{2}{3} \right) - \frac{3}{12} \right] + 6 - \frac{4}{3} - 4 \right\} - \left[\frac{1}{5} : \left(2 - \frac{3}{5} \right) \right] \cdot \frac{7}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= 1 - \left\{ \frac{4}{3} \cdot \left[\frac{1}{5} \cdot \left(2 - \frac{2}{3} \right) - \frac{1}{4} \right] + 2 - \frac{4}{3} \right\} - \left[\frac{1}{5} : \left(2 - \frac{3}{5} \right) \right] \cdot \frac{7}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= 1 - \left\{ \frac{4}{3} \cdot \left[\frac{1}{5} \cdot \left(\frac{6-2}{3} \right) - \frac{1}{4} \right] + 2 - \frac{4}{3} \right\} - \left[\frac{1}{5} : \left(\frac{10-3}{5} \right) \right] \cdot \frac{7}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= 1 - \left\{ \frac{4}{3} \cdot \left[\frac{1}{5} \cdot \left(\frac{4}{3} \right) - \frac{1}{4} \right] + 2 - \frac{4}{3} \right\} - \left[\frac{1}{5} : \left(\frac{7}{5} \right) \right] \cdot \frac{7}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= 1 - \left\{ \frac{4}{3} \cdot \left[\frac{4}{15} - \frac{1}{4} \right] + 2 - \frac{4}{3} \right\} - \left[\frac{1}{5} \cdot \frac{5}{7} \right] \cdot \frac{7}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= 1 - \left\{ \frac{4}{3} \cdot \left[\frac{16-15}{60} \right] + 2 - \frac{4}{3} \right\} - \frac{1}{7} \cdot \frac{7}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= 1 - \left\{ \frac{4}{3} \cdot \frac{1}{60} + 2 - \frac{4}{3} \right\} - \frac{1}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= 1 - \left\{ \frac{1}{45} + 2 - \frac{4}{3} \right\} - \frac{1}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= 1 - \frac{1}{45} - 2 + \frac{4}{3} - \frac{1}{3} - \frac{1}{4} + \frac{16}{45} &= \\
= -1 + \frac{3}{3} - \frac{1}{4} + \frac{15}{45} &= \\
= -1 + 1 - \frac{1}{4} + \frac{1}{3} &= \\
= -\frac{1}{4} + \frac{1}{3} = \frac{-3+4}{12} = \frac{1}{12} &= \frac{1}{12} \cdot \\
& \quad (127)
\end{aligned}$$

$$\begin{aligned}
& \left[(-3)^{-2} - \left(\frac{2}{3}\right)^{4-1} - \left(-\frac{3}{9} + \frac{1}{2} + 4^0 - \frac{10}{12}\right)^3 : \left(2^0 + \frac{1}{6} - \frac{3}{2}\right)^2 \right] : \\
& \quad \left[-\frac{1}{3} - \left(-\frac{3}{2}\right)^{-3} : \frac{6}{27} + \left(-1^1 - \frac{1}{9}\right) \cdot \left(-\frac{25}{15}\right) \right] = \\
& = \left[(-3)^{-2} - \left(\frac{2}{3}\right)^3 - \left(-\frac{1}{3} + \frac{1}{2} + 1 - \frac{5}{6}\right)^3 : \left(1 + \frac{1}{6} - \frac{3}{2}\right)^2 \right] : \\
& \quad \left[-\frac{1}{3} - \left(-\frac{3}{2}\right)^{-3} : \frac{2}{9} + \left(-1 - \frac{1}{9}\right) \cdot \left(-\frac{5}{3}\right) \right] = \\
& = \left[\left(-\frac{1}{3}\right)^2 - \frac{8}{27} - \left(\frac{-2+3+6-5}{6}\right)^3 : \left(\frac{6+1-9}{6}\right)^2 \right] : \\
& \quad \left[-\frac{1}{3} - \left(-\frac{2}{3}\right)^3 \cdot \frac{9}{2} + \left(\frac{-9-1}{9}\right) \cdot \left(-\frac{5}{3}\right) \right] = \\
& = \left[\frac{1}{9} - \frac{8}{27} - \left(\frac{2}{6}\right)^3 : \left(-\frac{2}{6}\right)^2 \right] : \left[-\frac{1}{3} + \frac{8}{27} \cdot \frac{9}{2} - \frac{10}{9} \cdot \left(-\frac{5}{3}\right) \right] = \tag{128} \\
& = \left[\frac{1}{9} - \frac{8}{27} - \left(\frac{1}{3}\right)^3 : \left(-\frac{1}{3}\right)^2 \right] : \left[-\frac{1}{3} + \frac{4}{3} + \frac{50}{27} \right] = \\
& = \left[\frac{1}{9} - \frac{8}{27} - \frac{1}{27} : \frac{1}{9} \right] : \left[\frac{3}{3} + \frac{50}{27} \right] = \\
& = \left[\frac{1}{9} - \frac{8}{27} - \frac{1}{27} \cdot 9 \right] : \left[1 + \frac{50}{27} \right] = \\
& = \left[\frac{1}{9} - \frac{8}{27} - \frac{1}{3} \right] : \left[\frac{27+50}{27} \right] = \\
& = \left[\frac{3-8-9}{27} \right] : \left[\frac{77}{27} \right] = \\
& = -\frac{14}{27} \cdot \frac{27}{77} = -\frac{14}{77} = -\frac{2}{11}.
\end{aligned}$$

$$\begin{aligned}
& \frac{(2^1 - 1,600) \cdot \left(\frac{51}{135} - 0,10\right) + \frac{22}{26} \cdot 0,3\overline{9}}{\left(0,7\overline{7} - \frac{37}{63}\right)^2 : \frac{2}{98} + 2^0 + 0,2} \cdot 0,45 + \frac{2}{10} = \\
& = \frac{(2 - 1,6) \cdot \left(\frac{17}{45} - 0,1\right) + \frac{11}{13} \cdot 0,3\overline{9}}{\left(0,7\overline{7} - \frac{37}{63}\right)^2 : \frac{1}{49} + 1 + 0,2} \cdot 0,45 + \frac{2}{10} = \\
& = \frac{\left(2 - \frac{16}{10}\right) \cdot \left(\frac{17}{45} - \frac{1}{10}\right) + \frac{11}{13} \cdot \frac{39 - 0}{99}}{\left(\frac{7 - 0}{9} - \frac{37}{63}\right)^2 \cdot 49 + 1 + \frac{2 - 0}{9}} \cdot \frac{45}{100} + \frac{2}{10} = \\
& = \frac{\left(2 - \frac{8}{5}\right) \cdot \left(\frac{17}{45} - \frac{1}{10}\right) + \frac{11}{13} \cdot \frac{39}{99}}{\left(\frac{7}{9} - \frac{37}{63}\right)^2 \cdot 49 + 1 + \frac{2}{9}} \cdot \frac{9}{20} + \frac{1}{5} = \\
& = \frac{\left(\frac{10 - 8}{5}\right) \cdot \left(\frac{34 - 9}{90}\right) + \frac{11}{13} \cdot \frac{13}{33}}{\left(\frac{49 - 37}{63}\right)^2 \cdot 49 + 1 + \frac{2}{9}} \cdot \frac{9}{20} + \frac{1}{5} = \\
& = \frac{\frac{2}{5} \cdot \frac{25}{90} + \frac{1}{3}}{\left(\frac{12}{63}\right)^2 \cdot 49 + 1 + \frac{2}{9}} \cdot \frac{9}{20} + \frac{1}{5} = \\
& = \frac{\frac{1}{9} + \frac{1}{3}}{\left(\frac{4}{21}\right)^2 \cdot 49 + 1 + \frac{2}{9}} \cdot \frac{9}{20} + \frac{1}{5} = \frac{\frac{1 + 3}{9}}{\frac{16}{441} \cdot 49 + 1 + \frac{2}{9}} \cdot \frac{9}{20} + \frac{1}{5} = \frac{\frac{4}{9}}{\frac{16}{9} + 1 + \frac{2}{9}} \cdot \frac{9}{20} + \frac{1}{5} = \\
& = \frac{\frac{4}{9}}{\frac{18}{9} + 1} \cdot \frac{9}{20} + \frac{1}{5} = \frac{\frac{4}{9}}{2 + 1} \cdot \frac{9}{20} + \frac{1}{5} = \frac{4}{3} \cdot \frac{9}{20} + \frac{1}{5} = \frac{4}{9} \cdot \frac{1}{3} \cdot \frac{9}{20} + \frac{1}{5} = \\
& = \frac{4}{60} + \frac{1}{5} = \frac{1}{15} + \frac{1}{5} = \frac{1 + 3}{15} = \frac{4}{15}.
\end{aligned}$$

$$\begin{aligned}
& \frac{\left(\frac{14}{12} + \frac{5}{12}\right) \cdot \frac{6}{4} - 2^1 \cdot \left[\frac{5}{4} \cdot \left(-\frac{3}{4} + \frac{21}{15}\right) - \left(-\frac{13}{6} + \frac{16}{6}\right) \cdot \frac{1}{4}\right]}{\left[\left(\frac{18}{15} - \frac{8}{15}\right) : \left(\frac{13}{8} - \frac{8}{6}\right)\right] \cdot 2^2} = \\
& = \frac{\left(\frac{7}{6} + \frac{5}{12}\right) \cdot \frac{3}{2} - 2 \cdot \left[\frac{5}{4} \cdot \left(-\frac{3}{4} + \frac{7}{5}\right) - \left(-\frac{13}{6} + \frac{8}{3}\right) \cdot \frac{1}{4}\right]}{\left[\left(\frac{6}{5} - \frac{8}{15}\right) : \left(\frac{13}{8} - \frac{4}{3}\right)\right] \cdot 4} = \\
& = \frac{\left(\frac{14+5}{12}\right) \cdot \frac{3}{2} - 2 \cdot \left[\frac{5}{4} \cdot \left(\frac{-15+28}{20}\right) - \left(\frac{-13+16}{6}\right) \cdot \frac{1}{4}\right]}{\left[\left(\frac{18-8}{15}\right) : \left(\frac{39-32}{24}\right)\right] \cdot 4} = \\
& = \frac{\frac{19}{12} \cdot \frac{3}{2} - 2 \cdot \left[\frac{5}{4} \cdot \left(\frac{13}{20}\right) - \left(\frac{3}{6}\right) \cdot \frac{1}{4}\right]}{\left[\left(\frac{10}{15}\right) : \left(\frac{7}{24}\right)\right] \cdot 4} = \tag{130} \\
& = \frac{\frac{19}{4} \cdot \frac{1}{2} - 2 \cdot \left[\frac{13}{16} - \frac{1}{8}\right]}{\left[\left(\frac{2}{3}\right) \cdot \left(\frac{24}{7}\right)\right] \cdot 4} = \\
& = \frac{\frac{19}{8} - 2 \cdot \left[\frac{13-2}{16}\right]}{\left[\frac{16}{7}\right] \cdot 4} = \frac{\frac{19}{8} - 2 \cdot \frac{11}{16}}{\frac{64}{7}} = \\
& = \frac{\frac{19}{8} - \frac{11}{8}}{\frac{64}{7}} = \frac{\frac{8}{8}}{\frac{64}{7}} = 1 \cdot \frac{7}{64} = \frac{7}{64}.
\end{aligned}$$

$$\begin{aligned}
& \left[\left(\frac{14}{8} + \frac{1}{2} \right) - \left(6 : 2^1 + \frac{1}{4} \right) + \left(\frac{4}{3} - 3^1 \right) \right] + \left(\frac{4}{24} - 7^0 \right) = \\
& = \left[\left(\frac{7}{4} + \frac{1}{2} \right) - \left(3 + \frac{1}{4} \right) + \left(\frac{4}{3} - 3 \right) \right] + \left(\frac{1}{6} - 1 \right) = \\
& = \left[\left(\frac{7+2}{4} \right) - \left(\frac{12+1}{4} \right) + \left(\frac{4-9}{3} \right) \right] + \left(\frac{1-6}{6} \right) = \\
& = \left[\frac{9}{4} - \frac{13}{4} - \frac{5}{3} \right] + \left(-\frac{5}{6} \right) = \\
& = \left[-\frac{4}{4} - \frac{5}{3} \right] - \frac{5}{6} = \\
& = \left[-1 - \frac{5}{3} \right] - \frac{5}{6} = \\
& = \left[\frac{-3-5}{3} \right] - \frac{5}{6} = \\
& = -\frac{8}{3} - \frac{5}{6} = \frac{-16-5}{6} = -\frac{21}{6} = -\frac{7}{2}.
\end{aligned} \tag{131}$$

$$\begin{aligned}
& \frac{2}{12} - \left(\frac{3}{2} - \frac{8}{12} \right) + \left(\frac{2}{10} + \frac{1}{6} \right) + \left(\frac{15}{18} - \frac{1}{2} \right) + \left(4 : 2 - \frac{10}{15} \right) = \\
& = \frac{1}{6} - \left(\frac{3}{2} - \frac{2}{3} \right) + \left(\frac{1}{5} + \frac{1}{6} \right) + \left(\frac{5}{6} - \frac{1}{2} \right) + \left(2 - \frac{2}{3} \right) = \\
& = \frac{1}{6} - \left(\frac{9-4}{6} \right) + \left(\frac{6+5}{30} \right) + \left(\frac{5-3}{6} \right) + \left(\frac{6-2}{3} \right) = \\
& = \frac{1}{6} - \frac{5}{6} + \frac{11}{30} + \frac{1}{3} + \frac{4}{3} = \\
& = -\frac{2}{3} + \frac{11}{30} + \frac{5}{3} = \\
& = \frac{-20+11+50}{30} = \frac{41}{30}.
\end{aligned} \tag{132}$$

$$\begin{aligned}
& 3 \cdot 1 + \left(-5^0 - \frac{7}{14}\right) + \frac{4}{15} - \left[-\frac{2}{15} - \frac{4}{8} - \left(\frac{5}{4} - \frac{14}{4}\right)\right] = \\
& = 3 + \left(-1 - \frac{1}{2}\right) + \frac{4}{15} - \left[-\frac{2}{15} - \frac{1}{2} - \left(\frac{5}{4} - \frac{7}{2}\right)\right] = \\
& = 3 + \left(\frac{-2-1}{2}\right) + \frac{4}{15} - \left[-\frac{2}{15} - \frac{1}{2} - \left(\frac{5-14}{4}\right)\right] = \\
& = 3 - \frac{3}{2} + \frac{4}{15} - \left[-\frac{2}{15} - \frac{1}{2} - \left(-\frac{9}{4}\right)\right] = \\
& = 3 - \frac{3}{2} + \frac{4}{15} - \left[-\frac{2}{15} - \frac{1}{2} + \frac{9}{4}\right] = \\
& = 3 - \frac{3}{2} + \frac{4}{15} + \frac{2}{15} + \frac{1}{2} - \frac{9}{4} = \\
& = 3 - \frac{2}{2} + \frac{6}{15} - \frac{9}{4} = \\
& = 3 - 1 + \frac{6}{15} - \frac{9}{4} = \\
& = 2 + \frac{6}{15} - \frac{9}{4} = \\
& = \frac{120 + 24 - 135}{60} = \frac{9}{60} = \frac{3}{20}.
\end{aligned} \tag{133}$$

$$\begin{aligned}
& \left[\left(\frac{2}{12} - \frac{3}{2}\right) \cdot \frac{8}{12} - \frac{1}{3}\right] - \frac{2}{8} \cdot \left[2 \cdot 6 \cdot \left(\frac{1}{2} + \frac{2}{6}\right) - \frac{4}{3}\right] + \frac{3}{9} - \frac{3}{2} + 2 \cdot 3 = \\
& = \left[\left(\frac{1}{6} - \frac{3}{2}\right) \cdot \frac{2}{3} - \frac{1}{3}\right] - \frac{1}{4} \cdot \left[12 \cdot \left(\frac{1}{2} + \frac{1}{3}\right) - \frac{4}{3}\right] + \frac{1}{3} - \frac{3}{2} + 6 = \\
& = \left[\left(\frac{1-9}{6}\right) \cdot \frac{2}{3} - \frac{1}{3}\right] - \frac{1}{4} \cdot \left[12 \cdot \left(\frac{3+2}{6}\right) - \frac{4}{3}\right] + \frac{1}{3} - \frac{3}{2} + 6 = \\
& = \left[-\frac{8}{6} \cdot \frac{2}{3} - \frac{1}{3}\right] - \frac{1}{4} \cdot \left[12 \cdot \frac{5}{6} - \frac{4}{3}\right] + \frac{1}{3} - \frac{3}{2} + 6 = \\
& = \left[-\frac{8}{9} - \frac{1}{3}\right] - \frac{1}{4} \cdot \left[10 - \frac{4}{3}\right] + \frac{1}{3} - \frac{3}{2} + 6 = \\
& = \left[\frac{-8-3}{9}\right] - \frac{1}{4} \cdot \left[\frac{30-4}{3}\right] + \frac{1}{3} - \frac{3}{2} + 6 = \\
& = -\frac{11}{9} - \frac{1}{4} \cdot \frac{26}{3} + \frac{1}{3} - \frac{3}{2} + 6 = \\
& = -\frac{11}{9} - \frac{13}{6} + \frac{1}{3} - \frac{3}{2} + 6 = \frac{-22 - 39 + 6 - 27 + 108}{18} = \frac{26}{18} = \frac{13}{9}.
\end{aligned} \tag{134}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{2}{16} - \frac{1}{6} \right) : \left(\frac{3}{9} - \frac{1}{2} \right) - \frac{3}{2} \right] \cdot 2^2 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} - \left(\frac{3}{18} - \frac{15}{4} \right) = \\
& = \left\{ \left[\left(\frac{1}{8} - \frac{1}{6} \right) : \left(\frac{1}{3} - \frac{1}{2} \right) - \frac{3}{2} \right] \cdot 4 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} - \left(\frac{1}{6} - \frac{15}{4} \right) = \\
& = \left\{ \left[\left(\frac{3-4}{24} \right) : \left(\frac{2-3}{6} \right) - \frac{3}{2} \right] \cdot 4 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} - \left(\frac{2-45}{12} \right) = \\
& = \left\{ \left[-\frac{1}{24} : \left(-\frac{1}{6} \right) - \frac{3}{2} \right] \cdot 4 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} + \frac{43}{12} = \\
& = \left\{ \left[-\frac{1}{24} \cdot (-6) - \frac{3}{2} \right] \cdot 4 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} + \frac{43}{12} = \\
& = \left\{ \left[\frac{1}{4} - \frac{3}{2} \right] \cdot 4 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} + \frac{43}{12} = \\
& = \left\{ \left[\frac{1-6}{4} \right] \cdot 4 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} + \frac{43}{12} = \\
& = \left\{ -\frac{5}{4} \cdot 4 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} + \frac{43}{12} = \\
& = \left\{ -5 - \frac{1}{6} \right\} \cdot 2 - \frac{1}{4} + \frac{43}{12} = \\
& = \left\{ \frac{-30-1}{6} \right\} \cdot 2 - \frac{1}{4} + \frac{43}{12} = \\
& = -\frac{31}{6} \cdot 2 - \frac{1}{4} + \frac{43}{12} = \\
& = -\frac{31}{3} - \frac{1}{4} + \frac{43}{12} = \frac{-124-3+43}{12} = -\frac{84}{12} = -7.
\end{aligned} \tag{135}$$

$$\begin{aligned}
& \frac{8}{22} \cdot \left[\left(-\frac{3}{8} + 3^1 \right) : \left(+\frac{6}{8} \right) : \left(\frac{5}{6} \cdot \frac{6}{40} \right) - \left(\frac{27}{8} : \frac{3}{4} \right) + \frac{1}{8} \right] \cdot \left(-\frac{1}{3} \right) = \\
& = \frac{4}{11} \cdot \left[\left(-\frac{3}{8} + 3 \right) : \left(+\frac{3}{4} \right) : \left(\frac{5}{6} \cdot \frac{3}{20} \right) - \left(\frac{27}{8} : \frac{3}{4} \right) + \frac{1}{8} \right] \cdot \left(-\frac{1}{3} \right) = \\
& = \frac{4}{11} \cdot \left[\left(\frac{-3+24}{8} \right) : \frac{3}{4} : \left(\frac{5}{6} \cdot \frac{3}{20} \right) - \left(\frac{27}{8} : \frac{3}{4} \right) + \frac{1}{8} \right] \cdot \left(-\frac{1}{3} \right) = \\
& = \frac{4}{11} \cdot \left[\frac{21}{8} \cdot \frac{4}{3} : \frac{1}{8} - \frac{9}{2} + \frac{1}{8} \right] \cdot \left(-\frac{1}{3} \right) = \\
& = \frac{4}{11} \cdot \left[\frac{7}{2} \cdot 8 - \frac{9}{2} + \frac{1}{8} \right] \cdot \left(-\frac{1}{3} \right) = \\
& = \frac{4}{11} \cdot \left[28 - \frac{9}{2} + \frac{1}{8} \right] \cdot \left(-\frac{1}{3} \right) = \\
& = \frac{4}{11} \cdot \left[\frac{224-36+1}{8} \right] \cdot \left(-\frac{1}{3} \right) = \\
& = \frac{4}{11} \cdot \frac{189}{8} \cdot \left(-\frac{1}{3} \right) = \\
& = \frac{189}{22} \cdot \left(-\frac{1}{3} \right) = -\frac{63}{22}.
\end{aligned} \tag{136}$$

$$\begin{aligned}
& -3^1 + \frac{7}{3} - \left\{ 4^0 + \frac{3}{18} - \left[\left(\frac{2}{4} - \frac{1}{3} \right) + 3 - \left(\frac{7}{12} + \frac{7}{28} \right) \right] - 6^0 \right\} = \\
& = -3 + \frac{7}{3} - \left\{ 1 + \frac{1}{6} - \left[\left(\frac{1}{2} - \frac{1}{3} \right) + 3 - \left(\frac{7}{12} + \frac{1}{4} \right) \right] - 1 \right\} = \\
& = -3 + \frac{7}{3} - \left\{ 1 + \frac{1}{6} - \left[\left(\frac{3-2}{6} \right) + 3 - \left(\frac{7+3}{12} \right) \right] - 1 \right\} = \\
& = -3 + \frac{7}{3} - \left\{ 1 + \frac{1}{6} - \left[\frac{1}{6} + 3 - \frac{5}{6} \right] - 1 \right\} = \\
& = -3 + \frac{7}{3} - \left\{ 1 + \frac{1}{6} - \frac{1}{6} - 3 + \frac{5}{6} - 1 \right\} = \\
& = -3 + \frac{7}{3} - \left\{ \frac{-18+5}{6} \right\} = \\
& = -3 + \frac{7}{3} - \left\{ -\frac{13}{6} \right\} = \\
& = -3 + \frac{7}{3} + \frac{13}{6} = \frac{-18+14+13}{6} = \frac{9}{6} = \frac{3}{2}.
\end{aligned} \tag{137}$$

$$\begin{aligned}
& -2 + \frac{20}{8} - \left\{ 1^0 + \frac{2}{3} - \left[\left(\frac{3}{6} - \frac{5}{6} \right) + 2 - \left(1 - \frac{14}{24} \right) \right] - \frac{2}{3} \right\} = \\
& = -2 + \frac{5}{2} - \left\{ 1 + \frac{2}{3} - \left[\left(\frac{1}{2} - \frac{5}{6} \right) + 2 - \left(1 - \frac{7}{12} \right) \right] - \frac{2}{3} \right\} = \\
& = -2 + \frac{5}{2} - \left\{ 1 + \frac{2}{3} - \left[\left(\frac{3-5}{6} \right) + 2 - \left(\frac{12-7}{12} \right) \right] - \frac{2}{3} \right\} = \\
& = -2 + \frac{5}{2} - \left\{ 1 + \frac{2}{3} - \left[\left(-\frac{2}{6} \right) + 2 - \left(\frac{5}{12} \right) \right] - \frac{2}{3} \right\} = \\
& = -2 + \frac{5}{2} - \left\{ 1 + \frac{2}{3} - \left[-\frac{1}{3} + 2 - \frac{5}{12} \right] - \frac{2}{3} \right\} = \\
& = -2 + \frac{5}{2} - \left\{ 1 + \frac{2}{3} + \frac{1}{3} - 2 + \frac{5}{12} - \frac{2}{3} \right\} = \\
& = -2 + \frac{5}{2} - \left\{ 1 + \frac{1}{3} - 2 + \frac{5}{12} \right\} = \\
& = -2 + \frac{5}{2} - 1 - \frac{1}{3} + 2 - \frac{5}{12} = \\
& = -1 + \frac{5}{2} - \frac{1}{3} - \frac{5}{12} = \frac{9}{12} = \frac{3}{4}.
\end{aligned} \tag{138}$$

$$\begin{aligned}
& \left\{ \frac{6}{20} + \left(-\frac{6}{5}\right) \cdot \left[-\left(\frac{3}{5} + \frac{4}{8} - \frac{3}{30}\right) + \frac{5}{6} \right] \right\} : \left[-\frac{1}{4} + \left(-6 + 4 + \frac{5}{3}\right) \cdot \frac{18}{8} \right] + 0^3 = \\
& = \left\{ \frac{3}{10} + \left(-\frac{6}{5}\right) \cdot \left[-\left(\frac{3}{5} + \frac{1}{2} - \frac{1}{10}\right) + \frac{5}{6} \right] \right\} : \left[-\frac{1}{4} + \left(-2 + \frac{5}{3}\right) \cdot \frac{9}{4} \right] = \\
& = \left\{ \frac{3}{10} + \left(-\frac{6}{5}\right) \cdot \left[-\left(\frac{6+5-1}{10}\right) + \frac{5}{6} \right] \right\} : \left[-\frac{1}{4} + \left(\frac{-6+5}{3}\right) \cdot \frac{9}{4} \right] = \\
& = \left\{ \frac{3}{10} + \left(-\frac{6}{5}\right) \cdot \left[-\left(\frac{10}{10}\right) + \frac{5}{6} \right] \right\} : \left[-\frac{1}{4} + \left(-\frac{1}{3}\right) \cdot \frac{9}{4} \right] = \\
& = \left\{ \frac{3}{10} + \left(-\frac{6}{5}\right) \cdot \left[-1 + \frac{5}{6} \right] \right\} : \left[-\frac{1}{4} - \frac{3}{4} \right] = \\
& = \left\{ \frac{3}{10} + \left(-\frac{6}{5}\right) \cdot \left[\frac{-6+5}{6} \right] \right\} : \left[-\frac{4}{4} \right] = \\
& = \left\{ \frac{3}{10} + \left(-\frac{6}{5}\right) \cdot \left[-\frac{1}{6} \right] \right\} : -1 = \\
& = \left\{ \frac{3}{10} + \frac{1}{5} \right\} \cdot (-1) = \\
& = \left\{ \frac{3+2}{10} \right\} \cdot (-1) = \\
& = \frac{5}{10} \cdot (-1) = \frac{1}{2} \cdot (-1) = -\frac{1}{2}.
\end{aligned}$$

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$$\begin{aligned}
& \left\{ \left[\left(\frac{5}{12} - \frac{3}{18}\right)^2 - \left(4^0 + \frac{1}{2}\right)^2 + \frac{2}{64} \cdot (-6) \right] : \left(-\frac{19}{4}\right) - 3^0 \right\}^3 = \\
& = \left\{ \left[\left(\frac{5}{12} - \frac{1}{6}\right)^2 - \left(1 + \frac{1}{2}\right)^2 + \frac{1}{32} \cdot (-6) \right] : \left(-\frac{19}{4}\right) - 1 \right\}^3 = \\
& = \left\{ \left[\left(\frac{5-2}{12}\right)^2 - \left(\frac{2+1}{2}\right)^2 - \frac{3}{16} \right] \cdot \left(-\frac{4}{19}\right) - 1 \right\}^3 = \\
& = \left\{ \left[\left(\frac{3}{12}\right)^2 - \left(\frac{3}{2}\right)^2 - \frac{3}{16} \right] \cdot \left(-\frac{4}{19}\right) - 1 \right\}^3 = \\
& = \left\{ \left[\frac{1}{16} - \frac{9}{4} - \frac{3}{16} \right] \cdot \left(-\frac{4}{19}\right) - 1 \right\}^3 = \tag{140} \\
& = \left\{ \left[-\frac{9}{4} - \frac{2}{16} \right] \cdot \left(-\frac{4}{19}\right) - 1 \right\}^3 = \\
& = \left\{ \left[-\frac{9}{4} - \frac{1}{8} \right] \cdot \left(-\frac{4}{19}\right) - 1 \right\}^3 = \\
& = \left\{ \left[\frac{-18-1}{8} \right] \cdot \left(-\frac{4}{19}\right) - 1 \right\}^3 = \\
& = \left\{ -\frac{19}{8} \cdot \left(-\frac{4}{19}\right) - 1 \right\}^3 = \\
& = \left\{ \frac{1}{2} - 1 \right\}^3 = \left\{ \frac{1-2}{2} \right\}^3 = \left\{ -\frac{1}{2} \right\}^3 = -\frac{1}{8}.
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{4}{9} - \frac{3}{9} \right)^2 - \left(\frac{6}{10} - \frac{2}{6} \right)^{4-2} \cdot \left(\frac{5}{3} \right)^2 + \frac{4}{8} \right] : \left(-\frac{17}{27} \right) + \frac{9}{12} \right\}^2 = \\
& = \left\{ \left[\left(\frac{4}{9} - \frac{1}{3} \right)^2 - \left(\frac{3}{5} - \frac{1}{3} \right)^2 \cdot \left(\frac{5}{3} \right)^2 + \frac{1}{2} \right] : \left(-\frac{17}{27} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \left[\left(\frac{4-3}{9} \right)^2 - \left(\frac{9-5}{15} \right)^2 \cdot \frac{25}{9} + \frac{1}{2} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \left[\left(\frac{1}{9} \right)^2 - \left(\frac{4}{15} \right)^2 \cdot \frac{25}{9} + \frac{1}{2} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \left[\frac{1}{81} - \frac{16}{225} \cdot \frac{25}{9} + \frac{1}{2} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \left[\frac{1}{81} - \frac{16}{81} + \frac{1}{2} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \tag{141} \\
& = \left\{ \left[-\frac{15}{81} + \frac{1}{2} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \left[\frac{-30+81}{162} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \frac{51}{162} \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ -\frac{1}{2} + \frac{3}{4} \right\}^2 = \left\{ \frac{-2+3}{4} \right\}^2 = \\
& = \left\{ \frac{1}{4} \right\}^2 = \frac{1}{16}.
\end{aligned}$$

$$\begin{aligned}
& -6 + 9^0 + 4 + \left(\frac{6}{4} - 2\right)^2 : \left\{ -2 - \left[\frac{10}{6} - \left(8^0 + \frac{1}{3}\right)^2 \cdot \left(\frac{8}{9}\right)^{-1} \right] \right\} - \frac{4}{40} = \\
& = 1 - 2 + \left(\frac{3}{2} - 2\right)^2 : \left\{ -2 - \left[\frac{5}{3} - \left(1 + \frac{1}{3}\right)^2 \cdot \left(\frac{8}{9}\right)^{-1} \right] \right\} - \frac{1}{10} = \\
& = -1 + \left(\frac{3-4}{2}\right)^2 : \left\{ -2 - \left[\frac{5}{3} - \left(\frac{3+1}{3}\right)^2 \cdot \frac{9}{8} \right] \right\} - \frac{1}{10} = \\
& = -1 + \left(-\frac{1}{2}\right)^2 : \left\{ -2 - \left[\frac{5}{3} - \left(\frac{4}{3}\right)^2 \cdot \frac{9}{8} \right] \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -2 - \left[\frac{5}{3} - \frac{16}{9} \cdot \frac{9}{8} \right] \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -2 - \left[\frac{5}{3} - 2 \right] \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -2 - \left[\frac{5-6}{3} \right] \right\} - \frac{1}{10} = \tag{142} \\
& = -1 + \frac{1}{4} : \left\{ -2 - \left[-\frac{1}{3} \right] \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -2 + \frac{1}{3} \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ \frac{-6+1}{3} \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} : \left\{ -\frac{5}{3} \right\} - \frac{1}{10} = \\
& = -1 + \frac{1}{4} \cdot \left\{ -\frac{3}{5} \right\} - \frac{1}{10} = \\
& = -1 - \frac{3}{20} - \frac{1}{10} = \frac{-20-3-2}{20} = -\frac{25}{20} = -\frac{5}{4}.
\end{aligned}$$

$$\begin{aligned}
& \frac{\left(-\frac{18}{14}\right)^3 \cdot \left(4^0 + \frac{2}{5}\right)^{4-1} : \left(1 + \frac{8}{10}\right)^3}{3^{-3} \cdot \left(-\frac{1}{3}\right)^{-4+2} + \left(+\frac{4}{8}\right)^3 \cdot \left(-\frac{2}{5}\right)^3 : \left(-\frac{1}{5}\right)^2} = \\
& = \frac{\left(-\frac{9}{7}\right)^3 \cdot \left(1 + \frac{2}{5}\right)^3 : \left(1 + \frac{4}{5}\right)^3}{3^{-3} \cdot \left(-\frac{1}{3}\right)^{-2} + \left(+\frac{1}{2}\right)^3 \cdot \left(-\frac{2}{5}\right)^3 : \left(-\frac{1}{5}\right)^2} = \\
& = \frac{\left(-\frac{9}{7}\right)^3 \cdot \left(\frac{5+2}{5}\right)^3 : \left(\frac{5+4}{5}\right)^3}{\left(\frac{1}{3}\right)^3 \cdot (-3)^2 - \left(\frac{1}{5}\right)^3 \cdot (-5)^2} = \tag{143} \\
& = \frac{\left(-\frac{9}{7}\right)^3 \cdot \left(\frac{7}{5}\right)^3 : \left(\frac{9}{5}\right)^3}{\frac{1}{27} \cdot 9 - \frac{1}{125} \cdot 25} = \\
& = \frac{\left(-\frac{9}{5}\right)^3 : \left(\frac{9}{5}\right)^3 - \left(\frac{9}{5}\right)^0}{\frac{1}{3} - \frac{1}{5}} = \frac{5-3}{15} = \\
& = \frac{-1}{\frac{2}{15}} = -1 \cdot \frac{15}{2} = -\frac{15}{2}.
\end{aligned}$$

$$\begin{aligned}
& \frac{\frac{1}{3} - 2^1 \cdot \left(4^0 - \frac{1}{4}\right)}{\frac{2}{12} - \left(2 - \frac{1}{2}\right) \cdot (-3)} - \frac{2 - \left[\frac{4}{20} - \left(\frac{1}{3} - \frac{2}{10}\right) : \left(3^0 - \frac{1}{5}\right)\right]}{\frac{1}{11} \cdot \left(1 - \frac{1}{12}\right) \cdot \left(2 \cdot 5^1 + \frac{9}{5}\right)} = \\
& = \frac{\frac{1}{3} - 2 \cdot \left(1 - \frac{1}{4}\right)}{\frac{1}{6} - \left(2 - \frac{1}{2}\right) \cdot (-3)} - \frac{2 - \left[\frac{1}{5} - \left(\frac{1}{3} - \frac{1}{5}\right) : \left(1 - \frac{1}{5}\right)\right]}{\frac{1}{11} \cdot \left(1 - \frac{1}{12}\right) \cdot \left(10 + \frac{9}{5}\right)} = \\
& = \frac{\frac{1}{3} - 2 \cdot \left(\frac{4-1}{4}\right)}{\frac{1}{6} - \left(\frac{4-1}{2}\right) \cdot (-3)} - \frac{2 - \left[\frac{1}{5} - \left(\frac{5-3}{15}\right) : \left(\frac{5-1}{5}\right)\right]}{\frac{1}{11} \cdot \left(\frac{12-1}{12}\right) \cdot \left(\frac{50+9}{5}\right)} = \\
& = \frac{\frac{1}{3} - 2 \cdot \frac{3}{4}}{\frac{1}{6} - \frac{3}{2} \cdot (-3)} - \frac{2 - \left[\frac{1}{5} - \frac{2}{15} : \frac{4}{5}\right]}{\frac{1}{11} \cdot \frac{11}{12} \cdot \frac{59}{5}} = \\
& = \frac{\frac{1}{3} - \frac{6}{4}}{\frac{1}{6} + \frac{9}{2}} - \frac{2 - \left[\frac{1}{5} - \frac{2}{15} \cdot \frac{5}{4}\right]}{\frac{59}{60}} = \frac{\frac{4-18}{12}}{\frac{1+27}{6}} - \frac{2 - \left[\frac{1}{5} - \frac{1}{6}\right]}{\frac{59}{60}} = \\
& = \frac{-\frac{7}{6}}{\frac{14}{3}} - \frac{2 - \left[\frac{6-5}{30}\right]}{\frac{59}{60}} = -\frac{7}{6} \cdot \frac{3}{14} - \frac{2 - \frac{1}{30}}{\frac{59}{60}} = \\
& = -\frac{1}{4} - \frac{\frac{60-1}{30}}{\frac{59}{60}} = -\frac{1}{4} - \frac{1}{30} \cdot \frac{60}{59} = \\
& = -\frac{1}{4} - 2 = \frac{-1-8}{4} = -\frac{9}{4}.
\end{aligned}$$

(144)

$$\begin{aligned}
& \frac{\frac{14}{35} + 2 \cdot \left(1 - \frac{3}{4}\right)}{\frac{6}{4} + \left(2 - \frac{1}{5}\right) \cdot \left(\frac{2}{3}\right)} + \frac{3 - \left[\frac{2}{8} - \left(\frac{1}{3} - \frac{1}{4}\right) : \left(-\frac{3}{2} + \frac{10}{15}\right)\right]}{\frac{1}{2} \cdot \left(\frac{3}{8} - 4^0\right) \cdot \left(3^2 + \frac{8}{5}\right)} = \\
& = \frac{\frac{2}{5} + 2 \cdot \left(1 - \frac{3}{4}\right)}{\frac{3}{2} + \left(2 - \frac{1}{5}\right) \cdot \left(\frac{2}{3}\right)} + \frac{3 - \left[\frac{1}{4} - \left(\frac{1}{3} - \frac{1}{4}\right) : \left(\frac{2}{3} - \frac{3}{2}\right)\right]}{\frac{1}{2} \cdot \left(\frac{3}{8} - 1\right) \cdot \left(9 + \frac{8}{5}\right)} = \\
& = \frac{\frac{2}{5} + 2 \cdot \left(\frac{4-3}{4}\right)}{\frac{3}{2} + \left(\frac{10-1}{5}\right) \cdot \left(\frac{2}{3}\right)} + \frac{3 - \left[\frac{1}{4} - \left(\frac{4-3}{12}\right) : \left(\frac{4-9}{6}\right)\right]}{\frac{1}{2} \cdot \left(\frac{3-8}{8}\right) \cdot \left(\frac{45+8}{5}\right)} = \\
& = \frac{\frac{2}{5} + 2 \cdot \left(\frac{1}{4}\right)}{\frac{3}{2} + \left(\frac{9}{5}\right) \cdot \left(\frac{2}{3}\right)} + \frac{3 - \left[\frac{1}{4} - \left(\frac{1}{12}\right) : \left(-\frac{5}{6}\right)\right]}{\frac{1}{2} \cdot \left(-\frac{5}{8}\right) \cdot \left(\frac{53}{5}\right)} = \\
& = \frac{\frac{2}{5} + \frac{1}{2}}{\frac{3}{2} + \frac{6}{5}} + \frac{3 - \left[\frac{1}{4} - \frac{1}{12} \cdot \left(-\frac{6}{5}\right)\right]}{\frac{1}{2} \cdot \left(-\frac{53}{8}\right)} = \\
& = \frac{\frac{4+5}{10}}{\frac{15+12}{10}} + \frac{3 - \left[\frac{1}{4} + \frac{1}{10}\right]}{\frac{53}{16}} = \frac{9}{10} \cdot \frac{10}{27} + \frac{3 - \left[\frac{5+2}{20}\right]}{\frac{53}{16}} = \\
& = \frac{1}{3} + \frac{3 - \frac{7}{20}}{\frac{53}{16}} = \frac{1}{3} + \frac{60-7}{53} = \frac{1}{3} + \frac{53}{20} \cdot -\frac{16}{53} = \\
& = \frac{1}{3} - \frac{4}{5} = \frac{5-12}{15} = -\frac{7}{15}.
\end{aligned}$$

(145)

$$\begin{aligned}
& \frac{\left\{ \left[\left(\frac{2}{3} \right)^3 + \left(\frac{5}{10} \right)^{5-3} \cdot \frac{2}{3} + \frac{32}{135} \right] \cdot \frac{25}{3} - 2^2 \right\} \cdot \frac{77}{3}}{\left[\left(\frac{4}{6} \right)^2 + 2^1 \cdot \frac{2}{3} \cdot \frac{1}{4} + \left(\frac{1}{4} \right)^2 \right] \cdot 3} - 10 - 3^1 = \\
& = \frac{\left\{ \left[\left(\frac{2}{3} \right)^3 + \left(\frac{1}{2} \right)^2 \cdot \frac{2}{3} + \frac{32}{135} \right] \cdot \frac{25}{3} - 4 \right\} \cdot \frac{77}{3}}{\left[\left(\frac{2}{3} \right)^2 + 2 \cdot \frac{2}{3} \cdot \frac{1}{4} + \left(\frac{1}{4} \right)^2 \right] \cdot 3} - 13 = \\
& = \frac{\left\{ \left[\frac{8}{27} + \frac{1}{4} \cdot \frac{2}{3} + \frac{32}{135} \right] \cdot \frac{25}{3} - 4 \right\} \cdot \frac{77}{3}}{\left[\frac{4}{9} + \frac{1}{3} + \frac{1}{16} \right] \cdot 3} - 13 = \\
& = \frac{\left\{ \left[\frac{8}{27} + \frac{1}{6} + \frac{32}{135} \right] \cdot \frac{25}{3} - 4 \right\} \cdot \frac{77}{3}}{\left[\frac{64 + 48 + 9}{144} \right] \cdot 3} - 13 = \\
& = \frac{\left\{ \left[\frac{80 + 45 + 64}{270} \right] \cdot \frac{25}{3} - 4 \right\} \cdot \frac{77}{3}}{\left[\frac{121}{144} \right] \cdot 3} - 13 = \tag{146} \\
& = \frac{\left\{ \frac{189}{270} \cdot \frac{25}{3} - 4 \right\} \cdot \frac{77}{3}}{\frac{121}{144} \cdot 3} - 13 = \\
& = \frac{\left\{ \frac{7}{10} \cdot \frac{25}{3} - 4 \right\} \cdot \frac{77}{3}}{\frac{121}{48}} - 13 = \frac{\left\{ \frac{35}{6} - 4 \right\} \cdot \frac{77}{3}}{\frac{121}{48}} - 13 = \\
& = \frac{\left\{ \frac{35 - 24}{6} \right\} \cdot \frac{77}{3}}{\frac{121}{48}} - 13 = \frac{11 \cdot \frac{77}{3}}{\frac{121}{48}} - 13 = \\
& = \frac{847}{121} - 13 = \frac{847}{18} \cdot \frac{48}{121} - 13 = \\
& = \frac{56}{3} - 13 = \frac{56 - 39}{3} = \frac{17}{3}.
\end{aligned}$$

$$\begin{aligned}
& \left[\left(2^1 - \frac{3}{5} : 2,25 \right) : \left(0,0\bar{7} + \frac{3}{45} \right) \right] \cdot \frac{5}{108} + 0,0\bar{3} : \left[\left(1,\bar{6} - \frac{1}{7} \right) : \left(7^0 + \frac{25}{7} \right) \right] = \\
& = \left[\left(2 - \frac{3}{5} : 2,25 \right) : \left(0,0\bar{7} + \frac{1}{15} \right) \right] \cdot \frac{5}{108} + 0,0\bar{3} : \left[\left(1,\bar{6} - \frac{1}{7} \right) : \left(1 + \frac{25}{7} \right) \right] = \\
& = \left[\left(2 - \frac{3}{5} : \frac{225}{100} \right) : \left(\frac{7-0}{90} + \frac{1}{15} \right) \right] \cdot \frac{5}{108} + \frac{3-0}{90} : \left[\left(\frac{16-1}{9} - \frac{1}{7} \right) : \left(1 + \frac{25}{7} \right) \right] = \\
& = \left[\left(2 - \frac{3}{5} : \frac{9}{4} \right) : \left(\frac{7}{90} + \frac{1}{15} \right) \right] \cdot \frac{5}{108} + \frac{1}{30} : \left[\left(\frac{15}{9} - \frac{1}{7} \right) : \left(1 + \frac{25}{7} \right) \right] = \\
& = \left[\left(2 - \frac{3}{5} \cdot \frac{4}{9} \right) : \left(\frac{7+6}{90} \right) \right] \cdot \frac{5}{108} + \frac{1}{30} : \left[\left(\frac{105-9}{63} \right) : \left(\frac{7+25}{7} \right) \right] = \\
& = \left[\left(2 - \frac{4}{15} \right) : \frac{16}{15} \right] \cdot \frac{5}{108} + \frac{1}{30} : \left[\frac{32}{21} : \frac{32}{7} \right] = \\
& = \left[\left(\frac{30-4}{15} \right) \cdot \frac{15}{16} \right] \cdot \frac{5}{108} + \frac{1}{30} : \left[\frac{32}{21} \cdot \frac{7}{32} \right] = \\
& = \left[\frac{26}{15} \cdot \frac{15}{16} \right] \cdot \frac{5}{108} + \frac{1}{30} : \frac{1}{3} = \\
& = 12 \cdot \frac{5}{108} + \frac{1}{30} \cdot 3 = \\
& = \frac{5}{9} + \frac{1}{10} = \frac{50+9}{90} = \frac{59}{90}.
\end{aligned}$$

(147)

$$\begin{aligned}
& \left[\left(0, 8\bar{3} - \frac{9}{21} \right) : \left(\frac{6}{7} + 0, \bar{2} \right) - \left(0, 3\bar{6} - 0, \bar{2} \right) : \left(0, 50 + 0, 5\bar{1} \right) \right] : \\
& \quad \left[\left(0, \bar{1} + \frac{4}{42} \right) : \left(0, 3 + 1 \right) \right] = \\
& = \left[\left(0, 8\bar{3} - \frac{3}{7} \right) : \left(\frac{6}{7} + 0, \bar{2} \right) - \left(0, 3\bar{6} - 0, \bar{2} \right) : \left(0, 5 + 0, 5\bar{1} \right) \right] : = \\
& \quad \left[\left(0, \bar{1} + \frac{2}{21} \right) : \left(0, 3 + 1 \right) \right] = \\
& = \left[\left(\frac{83-8}{90} - \frac{3}{7} \right) : \left(\frac{6}{7} + \frac{2-0}{9} \right) - \left(\frac{36-3}{90} - \frac{2-0}{9} \right) : \left(\frac{5}{10} + \frac{51-5}{90} \right) \right] : \\
& \quad \left[\left(\frac{1-0}{9} + \frac{2}{21} \right) : \left(\frac{3}{10} + 1 \right) \right] = \\
& = \left[\left(\frac{75}{90} - \frac{3}{7} \right) : \left(\frac{6}{7} + \frac{2}{9} \right) - \left(\frac{33}{90} - \frac{2}{9} \right) : \left(\frac{5}{10} + \frac{46}{90} \right) \right] : \\
& \quad \left[\left(\frac{1}{9} + \frac{2}{21} \right) : \left(\frac{3}{10} + 1 \right) \right] = \\
& = \left[\left(\frac{5}{6} - \frac{3}{7} \right) : \left(\frac{6}{7} + \frac{2}{9} \right) - \left(\frac{11}{30} - \frac{2}{9} \right) : \left(\frac{5}{10} + \frac{46}{90} \right) \right] : \\
& \quad \left[\left(\frac{1}{9} + \frac{2}{21} \right) : \left(\frac{3+10}{10} \right) \right] = \\
& = \left[\left(\frac{35-18}{42} \right) : \left(\frac{54+14}{63} \right) - \left(\frac{11}{30} - \frac{2}{9} \right) : \left(\frac{45+46}{90} \right) \right] : \\
& \quad \left[\left(\frac{7+6}{63} \right) : \left(\frac{13}{10} \right) \right] = \\
& = \left[\frac{17}{42} \cdot \frac{68}{63} - \left(\frac{33-20}{90} \right) : \left(\frac{91}{90} \right) \right] : \left[\frac{13}{63} \cdot \frac{10}{13} \right] = \\
& \quad = \left[\frac{21}{56} - \frac{13}{90} \cdot \frac{90}{91} \right] : \frac{10}{63} = \\
& = \left[\frac{21}{56} - \frac{1}{7} \right] \cdot \frac{63}{10} = \left[\frac{21-88}{56} \right] \cdot \frac{63}{10} = \\
& \quad = \frac{13}{56} \cdot \frac{63}{10} = \frac{819}{560} = \frac{117}{80}. \\
& \quad \quad \quad (148)
\end{aligned}$$

$$\begin{aligned}
& \frac{\left(\frac{6}{8}-0,0\bar{3}\right) \cdot \frac{3}{43} + (2,\bar{4}-1,2) \cdot \frac{27}{21}-\frac{8}{5}}{\left[\frac{2,3-2,\bar{15}}{0,20+1,\bar{3}} \cdot \left(5+\frac{8}{49}\right) + \frac{3}{4}\right] : \left(6^0+\frac{1}{4}\right)} + \frac{4}{0,\bar{2}+1,2} = \\
& = \frac{\left(\frac{3}{4}-0,0\bar{3}\right) \cdot \frac{3}{43} + (2,\bar{4}-1,2) \cdot \frac{9}{7}-\frac{8}{5}}{\left[\frac{2,3-2,\bar{15}}{0,2+1,\bar{3}} \cdot \left(5+\frac{8}{49}\right) + \frac{3}{4}\right] : \left(1+\frac{1}{4}\right)} + \frac{4}{0,\bar{2}+1,2} = \\
& = \frac{\left(\frac{3}{4}-\frac{3-0}{90}\right) \cdot \frac{3}{43} + \left(\frac{24-2}{9}-\frac{12}{10}\right) \cdot \frac{9}{7}-\frac{8}{5}}{\left[\frac{\frac{23}{10}-\frac{215-2}{99}}{\frac{2}{10}+\frac{13-1}{9}} \cdot \left(\frac{245+8}{49}\right) + \frac{3}{4}\right] : \left(1+\frac{1}{4}\right)} + \frac{4}{\frac{2-0}{9}+\frac{12}{10}} = \\
& = \frac{\left(\frac{3}{4}-\frac{1}{30}\right) \cdot \frac{3}{43} + \left(\frac{22}{9}-\frac{6}{5}\right) \cdot \frac{9}{7}-\frac{8}{5}}{\left[\frac{\frac{23}{10}-\frac{213}{99}}{\frac{1}{5}+\frac{3}{4}} \cdot \frac{253}{49} + \frac{3}{4}\right] : \left(\frac{4+1}{4}\right)} + \frac{4}{\frac{2}{9}+\frac{6}{5}} = \\
& = \frac{\left(\frac{45-2}{60}\right) \cdot \frac{3}{43} + \left(\frac{110-54}{45}\right) \cdot \frac{9}{7}-\frac{8}{5}}{\left[\frac{\frac{2277-2130}{990}}{\frac{3+20}{15}} \cdot \frac{253}{49} + \frac{3}{4}\right] : \frac{5}{4}} + \frac{4}{\frac{10+54}{45}} = \\
& = \frac{\left(\frac{43}{60}\right) \cdot \frac{3}{43} + \left(\frac{56}{45}\right) \cdot \frac{9}{7}-\frac{8}{5}}{\left[\frac{\frac{147}{990}}{\frac{23}{15}} \cdot \frac{253}{49} + \frac{3}{4}\right] \cdot \frac{4}{5}} + \frac{4}{\frac{1}{20}+\frac{8}{5}-\frac{8}{5}} + 4 \cdot \frac{45}{64} = \\
& = \frac{\frac{1}{20}}{\left[\frac{1}{2}+\frac{3}{4}\right] \cdot \frac{4}{5}} + \frac{45}{16} = \frac{\frac{1}{20}}{\left[\frac{2+3}{4}\right] \cdot \frac{4}{5}} + \frac{45}{16} = \frac{\frac{1}{20}}{\frac{5}{4} \cdot \frac{4}{5}} + \frac{45}{16} = \\
& = \frac{1}{20} + \frac{45}{16} = \frac{4+225}{80} = \frac{229}{80}.
\end{aligned}$$

(149)

$$\begin{aligned}
& \left\{ \left[\frac{10}{34} + 0,2\overline{7} \cdot \left(0,5\overline{5} - \frac{25}{100} \right) : (3^0 + 0,1\overline{3}) \right] : \left(0,3 + \frac{1}{17} \right) \right\} \\
& \quad \cdot (61 \cdot 0,0\overline{36}) + \frac{5}{10} = \\
& = \left\{ \left[\frac{5}{17} + 0,2\overline{7} \cdot \left(0,5\overline{5} - \frac{25}{100} \right) : (1 + 0,1\overline{3}) \right] : \left(0,3 + \frac{1}{17} \right) \right\} \\
\cdot (61 \cdot 0,0\overline{36}) + \frac{1}{2} & = \left\{ \left[\frac{5}{17} + \frac{27-0}{99} \cdot \left(\frac{5-0}{9} - \frac{25}{100} \right) : \left(1 + \frac{13-1}{90} \right) \right] : \left(\frac{3}{10} + \frac{1}{17} \right) \right\} \\
& \quad \cdot \left(61 \cdot \frac{36-0}{990} \right) + \frac{1}{2} = \\
& = \left\{ \left[\frac{5}{17} + \frac{3}{11} \cdot \left(\frac{5}{9} - \frac{1}{4} \right) : \left(1 + \frac{2}{15} \right) \right] : \left(\frac{51+10}{170} \right) \right\} \\
& \quad \cdot \left(61 \cdot \frac{2}{55} \right) + \frac{1}{2} = \\
& = \left\{ \left[\frac{5}{17} + \frac{3}{11} \cdot \left(\frac{20-9}{36} \right) : \left(\frac{15+2}{15} \right) \right] : \frac{61}{170} \right\} \\
& \quad \cdot \frac{122}{55} + \frac{1}{2} = \\
& = \left\{ \left[\frac{5}{17} + \frac{3}{11} \cdot \frac{11}{36} : \frac{17}{15} \right] : \frac{61}{170} \right\} \cdot \frac{122}{55} + \frac{1}{2} = \\
& = \left\{ \left[\frac{5}{17} + \frac{3}{11} \cdot \frac{11}{36} \cdot \frac{15}{17} \right] : \frac{170}{61} \right\} \cdot \frac{122}{55} + \frac{1}{2} = \\
& = \left\{ \left[\frac{5}{17} + \frac{5}{68} \right] : \frac{170}{61} \right\} \cdot \frac{122}{55} + \frac{1}{2} = \\
& = \left\{ \left[\frac{20+5}{68} \right] : \frac{170}{61} \right\} \cdot \frac{122}{55} + \frac{1}{2} = \\
& = \frac{25}{68} \cdot \frac{170}{61} \cdot \frac{122}{55} + \frac{1}{2} = \\
& = \frac{25}{11} + \frac{1}{2} = \frac{50+11}{22} = \frac{61}{22}.
\end{aligned}$$

(150)

$$\begin{aligned}
& \left(-\frac{1}{8}\right)^3 : \left\{ \left(\frac{2}{8} - \frac{7}{21}\right)^{4-2} \cdot \left[\left(\frac{1}{4}\right)^2 : \left(\frac{7}{14} - \frac{1}{3}\right)^2 \right] \right\} = \\
& = \left(-\frac{1}{8}\right)^3 : \left\{ \left(\frac{1}{4} - \frac{1}{3}\right)^2 \cdot \left[\left(\frac{1}{4}\right)^2 : \left(\frac{1}{2} - \frac{1}{3}\right)^2 \right] \right\} = \\
& = \left(-\frac{1}{8}\right)^3 : \left\{ \left(\frac{3-4}{12}\right)^2 \cdot \left[\left(\frac{1}{4}\right)^2 : \left(\frac{3-2}{6}\right)^2 \right] \right\} = \\
& = \left(-\frac{1}{8}\right)^3 : \left\{ \left(\frac{1}{12}\right)^2 \cdot \left[\frac{1}{16} : \frac{1}{36} \right] \right\} = \\
& = \left(-\frac{1}{8}\right)^3 : \left\{ \frac{1}{144} \cdot \left[\frac{1}{16} \cdot 36 \right] \right\} = \\
& = \left(-\frac{1}{8}\right)^3 : \left\{ \frac{1}{144} \cdot \frac{9}{4} \right\} = \\
& = \left(-\frac{1}{8}\right)^3 : \frac{1}{64} = \\
& = -\frac{1}{512} \cdot 64 = -\frac{1}{8}.
\end{aligned} \tag{151}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{4}{10}\right)^{-2} + \frac{35}{14} \right] \cdot \left(\frac{10}{4}\right)^{-4} + \left(-\frac{2}{5}\right)^2 : \left(\frac{2}{5}\right)^{-1} \right\}^{-1} = \\
& = \left\{ \left[\left(\frac{2}{5}\right)^{-2} + \frac{5}{2} \right] \cdot \left(\frac{5}{2}\right)^{-4} + \left(-\frac{2}{5}\right)^2 : \left(\frac{2}{5}\right)^{-1} \right\}^{-1} = \\
& = \left\{ \left[\left(\frac{5}{2}\right)^2 + \frac{5}{2} \right] \cdot \left(\frac{2}{5}\right)^4 + \left(\frac{5}{2}\right)^{-2} : \left(\frac{5}{2}\right) \right\}^{-1} = \\
& = \left\{ \left[\frac{25}{4} + \frac{5}{2} \right] \cdot \left(\frac{2}{5}\right)^4 + \left(\frac{5}{2}\right)^{-3} \right\}^{-1} = \\
& = \left\{ \frac{25+10}{4} \cdot \left(\frac{2}{5}\right)^4 + \left(\frac{2}{5}\right)^3 \right\}^{-1} = \\
& = \left\{ \frac{35}{4} \cdot \frac{16}{625} + \left(\frac{2}{5}\right)^3 \right\}^{-1} = \\
& = \left\{ \frac{28}{125} + \frac{8}{125} \right\}^{-1} = \\
& = \left\{ \frac{36}{125} \right\}^{-1} = \frac{125}{36}.
\end{aligned} \tag{152}$$

$$\begin{aligned}
& \left[\left(4 : 2 + \frac{2}{4} \right)^4 \cdot \left(3^1 - \frac{1}{2} \right)^2 \right]^2 \cdot \left(\frac{15}{6} \right)^2 : \left[\left(-\frac{5}{2} \right)^2 \cdot \left(\frac{5}{2} \right)^4 \right]^2 - \frac{20}{8} = \\
& = \left[\left(2 + \frac{1}{2} \right)^4 \cdot \left(3 - \frac{1}{2} \right)^2 \right]^2 \cdot \left(\frac{5}{2} \right)^2 : \left[\left(-\frac{5}{2} \right)^2 \cdot \left(\frac{5}{2} \right)^4 \right]^2 - \frac{5}{2} = \\
& = \left[\left(\frac{4+1}{2} \right)^4 \cdot \left(\frac{6-1}{2} \right)^2 \right]^2 \cdot \left(\frac{5}{2} \right)^2 : \left[\left(\frac{5}{2} \right)^6 \right]^2 - \frac{5}{2} = \\
& = \left[\left(\frac{5}{2} \right)^4 \cdot \left(\frac{5}{2} \right)^2 \right]^2 \cdot \left(\frac{5}{2} \right)^2 : \left(\frac{5}{2} \right)^{12} - \frac{5}{2} = \\
& = \left[\left(\frac{5}{2} \right)^6 \right]^2 \cdot \left(\frac{5}{2} \right)^2 : \left(\frac{5}{2} \right)^{12} - \frac{5}{2} = \\
& = \left(\frac{5}{2} \right)^{12} \cdot \left(\frac{5}{2} \right)^2 : \left(\frac{5}{2} \right)^{12} - \frac{5}{2} = \\
& = \left(\frac{5}{2} \right)^{14} : \left(\frac{5}{2} \right)^{12} - \frac{5}{2} = \\
& = \left(\frac{5}{2} \right)^2 - \frac{5}{2} = \\
& = \frac{25}{4} - \frac{5}{2} = \frac{25-10}{4} = \frac{15}{4}.
\end{aligned} \tag{153}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{8}{6} - \frac{3}{18} \right)^2 : \left(2 \cdot 1 + \frac{1}{4} - \frac{7}{14} \right)^2 \right] + \left(-\frac{3}{2} \right)^3 : \left(-\frac{3}{2} \right)^2 + 6^0 \right\} \\
& \quad : \left[\left(\frac{1}{5} + \frac{3}{10} \right)^2 \cdot \left(\frac{1}{10} + \frac{21}{14} \right) - 5^0 \right] = \\
& = \left\{ \left[\left(\frac{4}{3} - \frac{1}{6} \right)^2 : \left(2 + \frac{1}{4} - \frac{1}{2} \right)^2 \right] + \left(-\frac{3}{2} \right)^3 : \left(-\frac{3}{2} \right)^2 + 1 \right\} \\
& \quad : \left[\left(\frac{1}{5} + \frac{3}{10} \right)^2 \cdot \left(\frac{1}{10} + \frac{3}{2} \right) - 1 \right] = \\
& = \left\{ \left[\left(\frac{8-1}{6} \right)^2 : \left(\frac{8+1-2}{4} \right)^2 \right] - \frac{3}{2} + 1 \right\} \\
& \quad : \left[\left(\frac{2+3}{10} \right)^2 \cdot \left(\frac{1+15}{10} \right) - 1 \right] = \\
& = \left\{ \left[\left(\frac{7}{6} \right)^2 : \left(\frac{7}{4} \right)^2 \right] - \frac{3}{2} + 1 \right\} : \left[\frac{1}{4} \cdot \frac{8}{5} - 1 \right] = \\
& = \left\{ \left[\frac{49}{36} : \frac{49}{16} \right] - \frac{3}{2} + 1 \right\} : \left[\frac{2}{5} - 1 \right] = \\
& = \left\{ \left[\frac{49}{36} \cdot \frac{16}{49} \right] - \frac{3}{2} + 1 \right\} : \left[\frac{2-5}{5} \right] = \\
& = \left\{ \frac{4}{9} - \frac{3}{2} + 1 \right\} : -\frac{3}{5} = \\
& = \left\{ \frac{8-27+18}{18} \right\} \cdot \left(-\frac{5}{3} \right) = \\
& = -\frac{1}{18} \cdot \left(-\frac{5}{3} \right) = \frac{5}{54}.
\end{aligned} \tag{154}$$

$$\begin{aligned}
& \left(-\frac{3}{6}\right)^{5-2} \cdot \left(-\frac{1}{2}\right)^2 \cdot \left(\frac{1}{2}\right)^4 : \left[\left(\frac{8}{18}\right)^3 \cdot \left(2^0 + \frac{1}{8}\right)^3\right]^2 + 5^0 + \left(\frac{5}{10}\right)^3 = \\
& = \left(-\frac{1}{2}\right)^3 \cdot \left(-\frac{1}{2}\right)^2 \cdot \left(\frac{1}{2}\right)^4 : \left[\left(\frac{4}{9}\right)^3 \cdot \left(1 + \frac{1}{8}\right)^3\right]^2 + 1 + \left(\frac{1}{2}\right)^3 = \\
& = \left(-\frac{1}{2}\right)^9 : \left[\left(\frac{4}{9}\right)^3 \cdot \left(\frac{8+1}{8}\right)^3\right]^2 + 1 + \left(\frac{1}{2}\right)^3 = \\
& = \left(-\frac{1}{2}\right)^9 : \left[\left(\frac{4}{9}\right)^3 \cdot \left(\frac{9}{8}\right)^3\right]^2 + 1 + \left(\frac{1}{2}\right)^3 = \tag{155} \\
& = \left(-\frac{1}{2}\right)^9 : \left[\left(\frac{1}{2}\right)^3\right]^2 + 1 + \left(\frac{1}{2}\right)^3 = \\
& = \left(-\frac{1}{2}\right)^9 : \left(\frac{1}{2}\right)^6 + 1 + \left(\frac{1}{2}\right)^3 = \\
& = \left(-\frac{1}{2}\right)^9 \cdot 2^6 + 1 + \left(\frac{1}{2}\right)^3 = \\
& = \left(-\frac{1}{2}\right)^3 + 1 + \left(\frac{1}{2}\right)^3 = 1.
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[-\left(\frac{8}{10}\right)^2 \right]^3 \right\}^4 : \left[\left(\frac{4}{5}\right)^{12} \right]^1 \cdot \left\{ \left[\left(-\frac{3}{2}\right)^2 \right]^3 \right\}^2 : \left[\left(\frac{21}{35}\right)^2 \cdot \left(-\frac{3}{5}\right)^4 \cdot \left(\frac{6}{10}\right)^6 \right] = \\
& = \left\{ \left[-\left(\frac{4}{5}\right)^2 \right]^3 \right\}^4 : \left[\left(\frac{4}{5}\right)^6 \right]^2 \cdot \left\{ \left[\left(-\frac{3}{2}\right)^2 \right]^3 \right\}^2 : \left[\left(\frac{3}{5}\right)^2 \cdot \left(-\frac{3}{5}\right)^4 \cdot \left(\frac{3}{5}\right)^6 \right] = \\
& = \left(\frac{4}{5}\right)^{24} : \left(\frac{4}{5}\right)^{12} \cdot \left(\frac{3}{2}\right)^{12} : \left(\frac{3}{5}\right)^{12} = \\
& = \left(\frac{4}{5}\right)^{12} \cdot \left(\frac{3}{2}\right)^{12} \cdot \left(\frac{5}{3}\right)^{12} = \\
& = \left(\frac{4}{5}\right)^{12} \cdot \left(\frac{5}{2}\right)^{12} = \\
& = \left(\frac{4}{2}\right)^{12} = 2^{12}. \tag{156}
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{2}{3} \right)^{176} \right]^4 \right\} : \left[\left(-\frac{2}{3} \right)^{473} \right] : \left[\left(\frac{2}{3} \right)^3 \right]^2 \cdot \left[\left(-\frac{9}{12} \right)^2 \cdot \left(\frac{3}{4} \right)^3 \cdot \left(\frac{3}{4} \right)^3 \right] : \left(\frac{1}{2} \right)^4 = \\
& = \left\{ \left[\left(\frac{2}{3} \right)^{176} \right]^4 \right\} : \left[\left(-\frac{2}{3} \right)^{473} \right] : \left[\left(\frac{2}{3} \right)^3 \right]^2 \cdot \left[\left(-\frac{3}{4} \right)^2 \cdot \left(\frac{3}{4} \right)^3 \cdot \left(\frac{3}{4} \right)^3 \right] : \left(\frac{1}{2} \right)^4 = \\
& \qquad \qquad \qquad = \left(\frac{2}{3} \right)^{24} : \left(\frac{2}{3} \right)^{12} : \left(\frac{2}{3} \right)^6 \cdot \left(\frac{3}{4} \right)^8 : \left(\frac{1}{2} \right)^4 = \\
& \qquad \qquad \qquad = \left(\frac{2}{3} \right)^{12} : \left(\frac{2}{3} \right)^6 \cdot \left(\frac{3}{4} \right)^8 : \left(\frac{1}{2} \right)^4 = \\
& \qquad \qquad \qquad \qquad \qquad \qquad = \left(\frac{2}{3} \right)^6 \cdot \left(\frac{3}{4} \right)^8 \cdot 4^2 = \\
& \qquad \qquad \qquad \qquad \qquad \qquad = 2^6 \cdot \frac{3^2}{4^6} = 2^6 \cdot \frac{3^2}{2^{12}} = \frac{3^2}{2^6} = \frac{9}{64}.
\end{aligned}$$

(157)

$$\begin{aligned}
& \frac{\left[\left(1 \cdot 2 + \frac{4}{8} \right)^2 \cdot \left(3 - \frac{28}{21} \right)^2 \cdot \left(-3^0 - \frac{1}{5} \right)^2 \right]^{-1} : \left(-6 + 5 + \frac{4}{5} \right)^2}{\frac{4}{8} \cdot \left(-\frac{1}{3} \right)^{-2} + \left(\frac{2}{8} \right)^2 \cdot \left(8^0 - \frac{3}{8} \right)^{-2} : \left(1 - \frac{3}{5} \right)^2 - \frac{20}{8}} = \\
& = \frac{\left[\left(2 + \frac{1}{2} \right)^2 \cdot \left(3 - \frac{4}{3} \right)^2 \cdot \left(-1 - \frac{1}{5} \right)^2 \right]^{-1} : \left(-1 + \frac{4}{5} \right)^2}{\frac{1}{2} \cdot \left(-\frac{1}{3} \right)^{-2} + \left(\frac{1}{4} \right)^2 \cdot \left(1 - \frac{3}{8} \right)^{-2} : \left(1 - \frac{3}{5} \right)^2 - \frac{5}{2}} = \\
& = \frac{\left[\left(\frac{4+1}{2} \right)^2 \cdot \left(\frac{9-4}{3} \right)^2 \cdot \left(\frac{-5-1}{5} \right)^2 \right]^{-1} : \left(\frac{-5+4}{5} \right)^2}{\frac{1}{2} \cdot 9 + \frac{1}{16} \cdot \left(\frac{8-3}{8} \right)^{-2} : \left(\frac{5-3}{5} \right)^2 - \frac{5}{2}} = \\
& = \frac{\left[\left(\frac{5}{2} \right)^2 \cdot \left(\frac{5}{3} \right)^2 \cdot \left(-\frac{6}{5} \right)^2 \right]^{-1} : \left(-\frac{1}{5} \right)^2}{\frac{9}{2} + \frac{1}{16} \cdot \left(\frac{5}{8} \right)^{-2} : \left(\frac{2}{5} \right)^2 - \frac{5}{2}} = \\
& = \frac{\left[\left(\frac{25}{6} \right)^2 \cdot \left(\frac{6}{5} \right)^2 \right]^{-1} : \frac{1}{25}}{\frac{9}{2} + \frac{1}{16} \cdot \left(\frac{8}{5} \right)^2 : \left(\frac{2}{5} \right)^2 - \frac{5}{2}} = \\
& = \frac{(5^2)^{-1} : \frac{1}{25}}{\frac{9}{2} + \left(\frac{2}{5} \right)^2 : \left(\frac{2}{5} \right)^2 - \frac{5}{2}} = \\
& = \frac{5^{-2} : \frac{1}{25}}{\frac{4}{2} + \left(\frac{2}{5} \right)^0} = \\
& = \frac{\frac{1}{25} : \frac{1}{25}}{\frac{4}{2} + \left(\frac{2}{5} \right)^0} = \\
& = \frac{1}{2+1} = \frac{1}{3}.
\end{aligned}$$

(158)

$$\begin{aligned}
& \left[\left(-\frac{1}{4} \right)^6 : \left(-\frac{3}{6} \right)^6 \right] : \left(\frac{4}{8} \right)^{2 \cdot 2} + \left(\frac{1}{2} \right)^2 = \\
& = \left[\left(-\frac{1}{4} \right)^6 : \left(-\frac{1}{2} \right)^6 \right] : \left(\frac{1}{2} \right)^4 + \left(\frac{1}{2} \right)^2 = \\
& = \left(\frac{1}{2} \right)^6 : \left(\frac{1}{2} \right)^4 + \left(\frac{1}{2} \right)^2 = \\
& = \left(\frac{1}{2} \right)^2 + \left(\frac{1}{2} \right)^2 = \\
& = \frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}.
\end{aligned} \tag{159}$$

$$\begin{aligned}
& \left(-\frac{2}{3} \right)^3 - \left(-\frac{6}{9} \right)^2 \cdot \left(-\frac{18}{27} \right)^4 : \left(-\frac{8}{12} \right)^3 + \left(-\frac{7}{8} \right)^0 = \\
& = \left(-\frac{2}{3} \right)^3 - \left(-\frac{2}{3} \right)^2 \cdot \left(-\frac{2}{3} \right)^4 : \left(-\frac{2}{3} \right)^3 + \left(-\frac{7}{8} \right)^0 = \\
& = \left(-\frac{2}{3} \right)^3 - \left(\frac{2}{3} \right)^6 : \left(-\frac{2}{3} \right)^3 + 1 = \\
& = -\left(\frac{2}{3} \right)^3 + \left(\frac{2}{3} \right)^3 + 1 = 1.
\end{aligned} \tag{160}$$

$$\begin{aligned}
& \left[\left(4^0 + \frac{1}{2} \right)^3 \cdot \left(2^1 - \frac{1}{2} \right)^5 \right]^2 \cdot \left(\frac{6}{4} \right)^2 : \left[\left(-\frac{3}{2} \right)^8 \cdot \left(\frac{15}{10} \right)^7 \right] = \\
& = \left[\left(1 + \frac{1}{2} \right)^3 \cdot \left(2 - \frac{1}{2} \right)^5 \right]^2 \cdot \left(\frac{3}{2} \right)^2 : \left[\left(-\frac{3}{2} \right)^8 \cdot \left(\frac{3}{2} \right)^7 \right] = \\
& = \left[\left(\frac{2+1}{2} \right)^3 \cdot \left(\frac{4-1}{2} \right)^5 \right]^2 \cdot \left(\frac{3}{2} \right)^2 : \left[\left(\frac{3}{2} \right)^{15} \right] = \\
& = \left[\left(\frac{3}{2} \right)^3 \cdot \left(\frac{3}{2} \right)^5 \right]^2 \cdot \left(\frac{3}{2} \right)^2 : \left(\frac{3}{2} \right)^{15} = \\
& = \left[\left(\frac{3}{2} \right)^8 \right]^2 \cdot \left(\frac{3}{2} \right)^2 : \left(\frac{3}{2} \right)^{15} = \\
& = \left(\frac{3}{2} \right)^{16} \cdot \left(\frac{3}{2} \right)^2 : \left(\frac{3}{2} \right)^{15} = \\
& = \left(\frac{3}{2} \right)^{18} : \left(\frac{3}{2} \right)^{15} = \\
& = \left(\frac{3}{2} \right)^3 = \frac{27}{8}.
\end{aligned} \tag{161}$$

$$\begin{aligned}
& \left(-\frac{21}{35}\right)^8 : \left(4^0 - \frac{2}{5}\right)^5 \cdot \left[\left(2^1 + \frac{2}{4}\right)^2 \cdot \frac{5}{2}\right] - 5^0 = \\
& = \left(-\frac{3}{5}\right)^8 : \left(1 - \frac{2}{5}\right)^5 \cdot \left[\left(2 + \frac{1}{2}\right)^2 \cdot \frac{5}{2}\right] - 1 = \\
& = \left(-\frac{3}{5}\right)^8 : \left(\frac{5-2}{5}\right)^5 \cdot \left[\left(\frac{4+1}{2}\right)^2 \cdot \frac{5}{2}\right] - 1 = \\
& = \left(-\frac{3}{5}\right)^8 : \left(\frac{3}{5}\right)^5 \cdot \left[\left(\frac{5}{2}\right)^2 \cdot \frac{5}{2}\right] - 1 = \\
& = \left(\frac{3}{5}\right)^3 \cdot \left(\frac{5}{2}\right)^3 - 1 = \\
& = \left(\frac{3}{2}\right)^3 - 1 = \frac{27}{8} - 1 = \frac{27-8}{8} = \frac{19}{8}.
\end{aligned} \tag{162}$$

$$\begin{aligned}
& \left(2^1 - \frac{14}{9}\right)^2 : \left(-\frac{6}{9}\right)^2 - \left(2 - \frac{10}{6}\right)^4 \cdot 9 \cdot 3 - \frac{2}{9} = \\
& = \left(2 - \frac{14}{9}\right)^2 : \left(-\frac{2}{3}\right)^2 - \left(2 - \frac{5}{3}\right)^4 \cdot 27 - \frac{2}{9} = \\
& = \left(\frac{18-14}{9}\right)^2 : \frac{4}{9} - \left(\frac{6-5}{3}\right)^4 \cdot 27 - \frac{2}{9} = \\
& = \left(\frac{4}{9}\right)^2 : \frac{4}{9} - \left(\frac{1}{3}\right)^4 \cdot 27 - \frac{2}{9} = \\
& = \frac{4}{9} - \frac{1}{3} - \frac{2}{9} = \\
& = \frac{2}{9} - \frac{1}{3} = \frac{2-3}{9} = -\frac{1}{9}.
\end{aligned} \tag{163}$$

$$\begin{aligned}
& \left[\left(\frac{2}{5} - \frac{7}{42}\right) \cdot \left(\frac{5}{7} - 51\right) - 3\right] \cdot \frac{6}{48} - \left(\frac{14}{21} + 1^0\right) \cdot \left(2 - \frac{1}{5}\right) = \\
& = \left[\left(\frac{2}{5} - \frac{1}{6}\right) \cdot \left(\frac{5}{7} - 5\right) - 3\right] \cdot \frac{2}{16} - \left(\frac{2}{3} + 1\right) \cdot \left(2 - \frac{1}{5}\right) = \\
& = \left[\left(\frac{12-5}{30}\right) \cdot \left(\frac{5-35}{7}\right) - 3\right] \cdot \frac{1}{8} - \left(\frac{2+3}{3}\right) \cdot \left(\frac{10-1}{5}\right) = \\
& = \left[\frac{7}{30} \cdot \left(-\frac{30}{7}\right) - 3\right] \cdot \frac{1}{8} - \left(\frac{5}{3}\right) \cdot \left(\frac{9}{5}\right) = \\
& = [-1 - 3] \cdot \frac{1}{8} - 3 = \\
& = -4 \cdot \frac{1}{8} - 3 = -\frac{1}{2} - 3 = \frac{-1-6}{2} = -\frac{7}{2}.
\end{aligned} \tag{164}$$

$$\begin{aligned}
& \left(3^0 - \frac{1}{4}\right)^2 \cdot \left(\frac{6}{9}\right)^2 + \left[\left(\frac{14}{4}\right)^2 \cdot \left(-3 - \frac{1}{2}\right)^3 : \left(-1 - \frac{40}{16}\right)^4 + 9^0\right] = \\
& = \left(1 - \frac{1}{4}\right)^2 \cdot \left(\frac{2}{3}\right)^2 + \left[\left(\frac{7}{2}\right)^2 \cdot \left(-3 - \frac{1}{2}\right)^3 : \left(-1 - \frac{5}{2}\right)^4 + 1\right] = \\
& = \left(\frac{4-1}{4}\right)^2 \cdot \frac{4}{9} + \left[\left(\frac{7}{2}\right)^2 \cdot \left(\frac{-6-1}{2}\right)^3 : \left(\frac{-2-5}{2}\right)^4 + 1\right] = \\
& = \left(\frac{3}{4}\right)^2 \cdot \frac{4}{9} + \left[\left(\frac{7}{2}\right)^2 \cdot \left(-\frac{7}{2}\right)^3 : \left(-\frac{7}{2}\right)^4 + 1\right] = \\
& = \frac{1}{4} + \left[\left(-\frac{7}{2}\right)^5 : \left(-\frac{7}{2}\right)^4 + 1\right] = \\
& = \frac{1}{4} + \left[-\frac{7}{2} + 1\right] = \\
& = \frac{1}{4} + \left[\frac{-7+2}{2}\right] = \\
& = \frac{1}{4} - \frac{5}{2} = \frac{1-10}{4} = -\frac{9}{4}.
\end{aligned} \tag{165}$$

$$\begin{aligned}
& \left[\left(\frac{2}{35} - \frac{2}{10}\right) : \left(\frac{1}{7} - 4^0\right)\right] : \left[\frac{2}{3} : \left(\frac{6}{24} + \frac{3}{2}\right)\right] \cdot \left(-\frac{7}{3}\right)^0 - \left(-\frac{7}{14}\right)^4 = \\
& = \left[\left(\frac{2}{35} - \frac{1}{5}\right) : \left(\frac{1}{7} - 1\right)\right] : \left[\frac{2}{3} : \left(\frac{1}{4} + \frac{3}{2}\right)\right] \cdot \left(-\frac{7}{3}\right)^0 - \left(-\frac{1}{2}\right)^4 = \\
& = \left[\left(\frac{2-7}{35}\right) : \left(\frac{1-7}{7}\right)\right] : \left[\frac{2}{3} : \left(\frac{1+6}{4}\right)\right] \cdot 1 - \left(\frac{1}{2}\right)^4 = \\
& = \left[\left(-\frac{1}{7}\right) : \left(-\frac{6}{7}\right)\right] : \left[\frac{2}{3} : \frac{7}{4}\right] - \left(\frac{1}{2}\right)^4 = \\
& = \left[\left(-\frac{1}{7}\right) \cdot \left(-\frac{7}{6}\right)\right] : \left[\frac{2}{3} \cdot \frac{4}{7}\right] - \left(\frac{1}{2}\right)^4 = \\
& = \frac{1}{6} : \left[\frac{8}{21}\right] - \left(\frac{1}{2}\right)^4 = \\
& = \frac{1}{6} \cdot \frac{21}{8} - \frac{1}{16} = \\
& = \frac{21}{48} - \frac{1}{16} = \frac{21-3}{48} = \frac{18}{48} = \frac{3}{8}.
\end{aligned} \tag{166}$$

$$\begin{aligned}
& \frac{2}{3} - \frac{8}{48} + \left[\frac{3}{6} - \frac{1}{3} - \left(7^0 + \frac{4}{5} \right) \cdot 5^1 \right] - \left[\frac{4}{28} + \frac{2}{3} - \left(\frac{1}{14} + 1 \right) \right] \cdot \frac{7}{11} - (-2^3) = \\
& = \frac{2}{3} - \frac{1}{6} + \left[\frac{1}{2} - \frac{1}{3} - \left(1 + \frac{4}{5} \right) \cdot 5 \right] - \left[\frac{1}{7} + \frac{2}{3} - \left(\frac{1}{14} + 1 \right) \right] \cdot \frac{7}{11} - (-2^3) = \\
& = \frac{2}{3} - \frac{1}{6} + \left[\frac{1}{2} - \frac{1}{3} - \left(\frac{5+4}{5} \right) \cdot 5 \right] - \left[\frac{1}{7} + \frac{2}{3} - \left(\frac{1+14}{14} \right) \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{2}{3} - \frac{1}{6} + \left[\frac{1}{2} - \frac{1}{3} - \frac{9}{5} \cdot 5 \right] - \left[\frac{1}{7} + \frac{2}{3} - \frac{15}{14} \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{2}{3} - \frac{1}{6} + \left[\frac{1}{2} - \frac{1}{3} - 9 \right] - \left[\frac{6+28-45}{42} \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{2}{3} - \frac{1}{6} + \left[\frac{3-2-54}{6} \right] - \left[\frac{-11}{42} \right] \cdot \frac{7}{11} + 8 = \\
& = \frac{2}{3} - \frac{1}{6} - \frac{53}{6} + \frac{11}{42} \cdot \frac{7}{11} + 8 = \\
& = \frac{2}{3} - \frac{1}{6} - \frac{53}{6} + \frac{1}{6} + 8 = \\
& = \frac{2}{3} - \frac{53}{6} + 8 = \frac{4-53+48}{6} = -\frac{1}{6}.
\end{aligned}$$

(167)

$$\begin{aligned}
& \left\{ \left[\left(3^1 - \frac{26}{22} \right) : \left(\frac{9}{6} - \frac{4}{11} \right) \right] - \frac{9}{15} \right\} \cdot \frac{8}{3} - \left[\frac{4}{3} : \frac{4}{12} - 2^2 + \frac{(-2)^4}{5} \right] = \\
& = \left\{ \left[\left(3 - \frac{13}{11} \right) : \left(\frac{3}{2} - \frac{4}{11} \right) \right] - \frac{3}{5} \right\} \cdot \frac{8}{3} - \left[\frac{4}{3} : \frac{1}{3} - 4 + \frac{(-2)^4}{5} \right] = \\
& = \left\{ \left[\left(\frac{33-13}{11} \right) : \left(\frac{33-8}{22} \right) \right] - \frac{3}{5} \right\} \cdot \frac{8}{3} - \left[\frac{4}{3} \cdot 3 - 4 + \frac{16}{5} \right] = \\
& = \left\{ \left[\frac{20}{11} : \frac{25}{22} \right] - \frac{3}{5} \right\} \cdot \frac{8}{3} - \frac{16}{5} = \\
& = \left\{ \left[\frac{20}{11} \cdot \frac{22}{25} \right] - \frac{3}{5} \right\} \cdot \frac{8}{3} - \frac{16}{5} = \\
& = \left\{ \frac{8}{5} - \frac{3}{5} \right\} \cdot \frac{8}{3} - \frac{16}{5} = \\
& = \frac{5}{5} \cdot \frac{8}{3} - \frac{16}{5} = \\
& = \frac{8}{3} - \frac{16}{5} = \frac{40-48}{15} = -\frac{8}{15}.
\end{aligned}$$

(168)

$$\begin{aligned}
& \left\{ \left[\left(\frac{8}{6} - \frac{3}{12} \right) \cdot \left(-\frac{2}{13} + 3 \right) - \frac{5}{2} \right] : \frac{14}{8} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{6}{15} + \frac{9^3}{36} : \frac{3^4}{4} = \\
& = \left\{ \left[\left(\frac{4}{3} - \frac{1}{4} \right) \cdot \left(-\frac{2}{13} + 3 \right) - \frac{5}{2} \right] : \frac{7}{4} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + \frac{9^3}{36} : \frac{3^4}{4} = \\
& = \left\{ \left[\left(\frac{16-3}{12} \right) \cdot \left(\frac{39-2}{13} \right) - \frac{5}{2} \right] : \frac{7}{4} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + \frac{81}{4} : \frac{81}{4} = \\
& = \left\{ \left[\frac{13}{12} \cdot \frac{37}{13} - \frac{5}{2} \right] : \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \left[\frac{37}{12} - \frac{5}{2} \right] : \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \left[\frac{37-30}{12} \right] : \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \tag{169} \\
& = \left\{ \frac{7}{12} \cdot \frac{4}{7} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = \left\{ \frac{1}{3} - \frac{2}{3} \right\} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = -\frac{1}{3} \cdot \frac{3}{5} - \frac{2}{5} + 1 = \\
& = -\frac{1}{5} - \frac{2}{5} + 1 = \\
& = -\frac{3}{5} + 1 = \frac{-3+5}{5} = \frac{2}{5}.
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[\left(\frac{12}{27} - \frac{2}{6} \right)^2 - \left(\frac{3}{5} - \frac{1}{3} \right)^2 \cdot \left(\frac{50}{30} \right)^2 + \frac{1}{2} \right] : \left(-\frac{17}{27} \right) + \frac{27}{36} \right\}^2 - \left(\frac{1}{32} \right)^3 : \left(\frac{1}{128} \right)^2 + \frac{4}{8} = \\
& = \left\{ \left[\left(\frac{4}{9} - \frac{1}{3} \right)^2 - \left(\frac{3}{5} - \frac{1}{3} \right)^2 \cdot \left(\frac{5}{3} \right)^2 + \frac{1}{2} \right] : \left(-\frac{17}{27} \right) + \frac{3}{4} \right\}^2 - \left(\frac{1}{32} \right)^3 : \left(\frac{1}{128} \right)^2 + \frac{1}{2} = \\
& = \left\{ \left[\left(\frac{4-3}{9} \right)^2 - \left(\frac{9-5}{15} \right)^2 \cdot \frac{25}{9} + \frac{1}{2} \right] : \left(-\frac{17}{27} \right) + \frac{3}{4} \right\}^2 - \left(\frac{1}{2} \right)^{15} : \left(\frac{1}{2} \right)^{14} + \frac{1}{2} = \\
& = \left\{ \left[\frac{1}{81} - \left(\frac{4}{15} \right)^2 \cdot \frac{25}{9} + \frac{1}{2} \right] : \left(-\frac{17}{27} \right) + \frac{3}{4} \right\}^2 - \frac{1}{2} + \frac{1}{2} = \\
& = \left\{ \left[\frac{1}{81} - \left(\frac{16}{81} \right) + \frac{1}{2} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \left[-\frac{15}{81} + \frac{1}{2} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \left[\frac{-30+81}{162} \right] \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ \frac{51}{162} \cdot \left(-\frac{27}{17} \right) + \frac{3}{4} \right\}^2 = \\
& = \left\{ -\frac{1}{2} + \frac{3}{4} \right\}^2 = \\
& = \left\{ \frac{-2+3}{4} \right\}^2 = \left\{ \frac{1}{4} \right\}^2 = \frac{1}{16}. \tag{170}
\end{aligned}$$

$$\begin{aligned}
& \left\{ \left[-\left(\frac{1}{2} - \frac{2}{20}\right) + \left(\frac{2}{12}\right)^4 : \left(-\frac{1}{6}\right)^3 \right] : \left(\frac{17}{5}\right)^2 \right\} \cdot \\
& \left\{ \frac{1}{5} + \left(4^0 + \frac{7}{35}\right)^2 \cdot \left[\left(-\frac{3}{5} + \frac{6}{12}\right)^2 \cdot \left(\frac{5}{3}\right)^2 - 8^0 \right] \right\} = \\
& = \left\{ \left[-\left(\frac{1}{2} - \frac{1}{10}\right) + \left(\frac{1}{6}\right)^4 : \left(-\frac{1}{6}\right)^3 \right] : \left(\frac{17}{5}\right)^2 \right\} \cdot \\
& \left\{ \frac{1}{5} + \left(1 + \frac{1}{5}\right)^2 \cdot \left[\left(-\frac{3}{5} + \frac{1}{2}\right)^2 \cdot \left(\frac{5}{3}\right)^2 - 1 \right] \right\} = \\
& = \left\{ \left[-\left(\frac{5-1}{10}\right) - \frac{1}{6} \right] : \left(\frac{17}{5}\right)^2 \right\} \cdot \\
& \left\{ \frac{1}{5} + \left(\frac{5+1}{5}\right)^2 \cdot \left[\left(\frac{-6+5}{10}\right)^2 \cdot \frac{25}{9} - 1 \right] \right\} = \tag{171} \\
& = \left\{ \left[-\frac{2}{5} - \frac{1}{6} \right] : \left(\frac{17}{5}\right)^2 \right\} \cdot \left\{ \frac{1}{5} + \frac{36}{25} \cdot \left[\frac{1}{100} \cdot \frac{25}{9} - 1 \right] \right\} = \\
& = \left\{ \left[\frac{-12-5}{30} \right] : \left(\frac{17}{5}\right)^2 \right\} \cdot \left\{ \frac{1}{5} + \frac{36}{25} \cdot \left[\frac{1}{36} - 1 \right] \right\} = \\
& = \left\{ -\frac{17}{30} \cdot \frac{25}{289} \right\} \cdot \left\{ \frac{1}{5} + \frac{36}{25} \cdot \left[\frac{1-36}{36} \right] \right\} = \\
& = \left\{ -\frac{5}{102} \right\} \cdot \left\{ \frac{1}{5} + \frac{36}{25} \cdot \left[-\frac{35}{36} \right] \right\} = \\
& = \left\{ -\frac{5}{102} \right\} \cdot \left\{ \frac{1}{5} - \frac{7}{5} \right\} = \\
& = \left\{ -\frac{5}{102} \right\} \cdot \left\{ -\frac{6}{5} \right\} = \frac{1}{17}.
\end{aligned}$$

$$\begin{aligned}
& \frac{\left(-\frac{4}{8}\right)^4 : \left(+\frac{7}{14}\right)^2 + \left[\left(\frac{23}{30} - \frac{26}{36}\right) \cdot \left(\frac{23}{15} - \frac{1}{30}\right)\right] \cdot \frac{6}{9} - \frac{5}{4}}{\left[\frac{13}{12} - \left(\frac{7}{9} - \frac{1}{3}\right) + \frac{2}{9}\right] - \left(-\frac{7}{18} + \frac{1}{12} + \frac{5}{6}\right) - \frac{1}{3} + 1} = \\
& = \frac{\left(-\frac{1}{2}\right)^4 : \left(+\frac{1}{2}\right)^2 + \left[\left(\frac{23}{30} - \frac{13}{18}\right) \cdot \left(\frac{23}{15} - \frac{1}{30}\right)\right] \cdot \frac{2}{3} - \frac{5}{4}}{\left[\frac{13}{12} - \left(\frac{7}{9} - \frac{1}{3}\right) + \frac{2}{9}\right] - \left(-\frac{7}{18} + \frac{1}{12} + \frac{5}{6}\right) - \frac{1}{3} + 1} = \\
& = \frac{\left(\frac{1}{2}\right)^2 + \left[\left(\frac{69-65}{90}\right) \cdot \left(\frac{46-1}{30}\right)\right] \cdot \frac{2}{3} - \frac{5}{4}}{\left[\frac{13}{12} - \left(\frac{7-3}{9}\right) + \frac{2}{9}\right] - \left(\frac{-14+3+30}{36}\right) - \frac{1}{3} + 1} = \\
& = \frac{\frac{1}{4} + \left[\frac{2}{45} \cdot \frac{3}{2}\right] \cdot \frac{2}{3} - \frac{5}{4}}{\left[\frac{13}{12} - \frac{4}{9} + \frac{2}{9}\right] - \frac{19}{36} - \frac{1}{3} + 1} = \frac{\frac{1}{4} + \frac{1}{15} \cdot \frac{2}{3} - \frac{5}{4}}{\left[\frac{13}{12} - \frac{2}{9}\right] - \frac{19}{36} - \frac{1}{3} + 1} = \\
& = \frac{\frac{1}{4} + \frac{2}{45} - \frac{5}{4}}{\left[\frac{39-8}{36}\right] - \frac{19}{36} - \frac{1}{3} + 1} = \frac{\frac{2}{45} - 1}{\frac{31}{36} - \frac{19}{36} - \frac{1}{3} + 1} = \frac{\frac{2-45}{45}}{\frac{1}{3} - \frac{1}{3} + 1} = \\
& = \frac{\frac{43}{-45}}{1} = -\frac{43}{45}.
\end{aligned}$$

(172)

$$\begin{aligned}
& \frac{\left(\frac{8}{3}-2^1-\frac{2}{5}\right) \cdot \left(\frac{14}{4}-\frac{7}{3}+\frac{13}{12}\right) \cdot \frac{30}{4} - \left[\left(\frac{2}{3}-\frac{3}{5}\right) \cdot \left(4^0+\frac{7}{2}-\frac{6}{8}\right)\right] \cdot \frac{15}{4}}{\left[\left(7^0+\frac{1}{2}-\frac{12}{20}\right) - \left(-\frac{4}{5}+\frac{3}{4}+\frac{5}{10}\right)\right] \cdot \left(\frac{4}{3}-\frac{45}{81}\right)} = \\
& = \frac{\left(\frac{8}{3}-2-\frac{2}{5}\right) \cdot \left(\frac{7}{2}-\frac{7}{3}+\frac{13}{12}\right) \cdot \frac{15}{2} - \left[\left(\frac{2}{3}-\frac{3}{5}\right) \cdot \left(1+\frac{7}{2}-\frac{3}{4}\right)\right] \cdot \frac{15}{4}}{\left[\left(1+\frac{1}{2}-\frac{3}{5}\right) - \left(-\frac{4}{5}+\frac{3}{4}+\frac{1}{2}\right)\right] \cdot \left(\frac{4}{3}-\frac{5}{9}\right)} = \\
& = \frac{\left(\frac{40-30-6}{15}\right) \cdot \left(\frac{42-28+13}{12}\right) \cdot \frac{15}{2} - \left[\left(\frac{10-9}{15}\right) \cdot \left(\frac{4+14-3}{4}\right)\right] \cdot \frac{15}{4}}{\left[\left(\frac{10+5-6}{10}\right) - \left(\frac{-16+15+10}{20}\right)\right] \cdot \left(\frac{12-5}{9}\right)} = \\
& = \frac{\frac{4}{15} \cdot \frac{27}{12} \cdot \frac{15}{2} - \left[\frac{1}{15} \cdot \frac{15}{4}\right] \cdot \frac{15}{4}}{\left[\frac{9}{10} - \frac{9}{20}\right] \cdot \frac{7}{9}} = \frac{\frac{9}{2} - \frac{1}{4} \cdot \frac{15}{4}}{\left[\frac{18-9}{20}\right] \cdot \frac{7}{9}} = \frac{\frac{9}{2} - \frac{15}{16}}{\frac{9}{20} \cdot \frac{7}{9}} = \frac{72-15}{16} \cdot \frac{20}{7} = \frac{57}{4} \cdot \frac{5}{7} = \frac{285}{28}.
\end{aligned}$$

(173)

$$\begin{aligned}
& 4 + \frac{\left(\frac{18}{24} + \frac{1}{3} : \frac{200}{500}\right) : \left(\frac{3}{5} + \frac{5}{3} - 7^0\right)}{\left(2 + \frac{1}{3}\right) \cdot \left(\frac{12}{16} - \frac{4}{7}\right)} + \frac{\frac{5}{9} + \frac{7}{21}}{\frac{4}{3} : \frac{5}{2}} - 9 + 1 + \frac{4}{6} = \\
& = 4 + \frac{\left(\frac{3}{4} + \frac{1}{3} : \frac{2}{5}\right) : \left(\frac{3}{5} + \frac{5}{3} - 1\right)}{\left(2 + \frac{1}{3}\right) \cdot \left(\frac{3}{4} - \frac{4}{7}\right)} + \frac{\frac{5}{9} + \frac{1}{3}}{\frac{4}{3} : \frac{5}{2}} - 8 + \frac{2}{3} = \\
& = 4 + \frac{\left(\frac{3}{4} + \frac{1}{3} \cdot \frac{5}{2}\right) : \left(\frac{9+25-15}{15}\right)}{\left(\frac{6+1}{3}\right) \cdot \left(\frac{21-16}{28}\right)} + \frac{\frac{5+3}{9}}{\frac{4}{3} \cdot \frac{2}{5}} - 8 + \frac{2}{3} = \\
& = 4 + \frac{\left(\frac{3}{4} + \frac{5}{6}\right) : \frac{19}{15}}{\frac{7}{3} \cdot \frac{5}{28}} + \frac{\frac{8}{9}}{\frac{8}{15}} - 8 + \frac{2}{3} = \\
& = 4 + \frac{\left(\frac{9+10}{12}\right) \cdot \frac{15}{19}}{\frac{5}{12}} + \frac{\frac{8}{9}}{\frac{8}{15}} - 8 + \frac{2}{3} = \\
& = 4 + \frac{\frac{19}{12} \cdot \frac{15}{19}}{\frac{5}{12}} + \frac{8}{9} \cdot \frac{15}{8} - 8 + \frac{2}{3} = 4 + \frac{5}{4} \cdot \frac{12}{5} + \frac{5}{3} - 8 + \frac{2}{3} = \\
& = 4 + 3 + \frac{5}{3} - 8 + \frac{2}{3} = \frac{7}{3} - 1 = \frac{7-3}{3} = \frac{4}{3}.
\end{aligned}$$

(174)

$$\begin{aligned}
& \frac{2^1 - \left(-\frac{1}{64}\right) \cdot \left(2^3 + \frac{1}{3}\right)^2 \cdot \left(2 \cdot 4 - \frac{1}{2}\right) \cdot \left(-5^0 - \frac{1}{5}\right)^3 \cdot \left(\frac{2}{6}\right)^2 \cdot \left(1 - \frac{7}{35}\right)^2 - \frac{1}{3}}{\left(\frac{6}{16} - \frac{1}{12} + \frac{5}{6}\right) + \left\{-\frac{50}{80} + \left[\frac{15}{4} + \left(-\frac{15}{28} - 2 - \frac{3}{4} + \frac{4}{14}\right)\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 - \left(-\frac{1}{64}\right) \cdot \left(8 + \frac{1}{3}\right)^2 \cdot \left(8 - \frac{1}{2}\right) \cdot \left(-1 - \frac{1}{5}\right)^3 \cdot \left(\frac{1}{3}\right)^2 \cdot \left(1 - \frac{1}{5}\right)^2 - \frac{1}{3}}{\left(\frac{3}{8} - \frac{1}{12} + \frac{5}{6}\right) + \left\{-\frac{5}{8} + \left[\frac{15}{4} + \left(-\frac{15}{28} - 2 - \frac{3}{4} + \frac{2}{7}\right)\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 - \left(-\frac{1}{64}\right) \cdot \left(\frac{24+1}{3}\right)^2 \cdot \left(\frac{16-1}{2}\right) \cdot \left(\frac{-5-1}{5}\right)^3 \cdot \frac{1}{9} \cdot \left(\frac{5-1}{5}\right)^2 - \frac{1}{3}}{\left(\frac{9-2+20}{24}\right) + \left\{-\frac{5}{8} + \left[\frac{15}{4} + \left(\frac{-15-56-21+8}{28}\right)\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 - \left(-\frac{1}{64}\right) \cdot \frac{625}{9} \cdot \frac{15}{2} \cdot \left(-\frac{216}{125}\right) \cdot \frac{1}{9} \cdot \left(\frac{4}{5}\right)^2 - \frac{1}{3}}{\frac{27}{24} + \left\{-\frac{5}{8} + \left[\frac{15}{4} - 3\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 - 1 - \frac{1}{3}}{\frac{27}{24} + \left\{-\frac{5}{8} + \left[\frac{15-12}{4}\right]\right\}} - \frac{3}{5} = \frac{1 - \frac{1}{3}}{\frac{27}{24} + \left\{-\frac{5}{8} + \frac{3}{4}\right\}} - \frac{3}{5} = \\
& = \frac{\frac{3-1}{3}}{\frac{27}{24} + \left\{\frac{-5+6}{8}\right\}} - \frac{3}{5} = \frac{\frac{2}{3}}{\frac{27}{24} + \frac{1}{8}} - \frac{3}{5} = \\
& = \frac{\frac{2}{3}}{\frac{27+3}{24}} - \frac{3}{5} = \frac{\frac{2}{3}}{\frac{4}{4}} - \frac{3}{5} = \frac{2}{3} \cdot \frac{4}{5} - \frac{3}{5} = \\
& = \frac{8}{15} - \frac{3}{5} = \frac{8-9}{15} = -\frac{1}{15}.
\end{aligned}$$

(175)

$$\begin{aligned}
& \frac{\left[\left(\frac{4}{16} - \frac{9}{25} \cdot \frac{10}{36} \right)^2 : \left(6^0 + \frac{4}{8} \right)^2 - \left(\frac{1}{10} \right)^2 \right] \cdot \left(\frac{14}{40} - 3^0 \right) + 6 : 2 - \frac{1}{4} + \frac{2}{3}}{\left[\left(1 - \frac{4}{12} - \frac{1}{2} \right) \cdot 2 + \left(\frac{2}{3} - \frac{1}{2} + \frac{4}{24} \right) \cdot 3 \right] : \frac{4}{3} + \frac{14}{21}} = \\
& = \frac{\left[\left(\frac{1}{4} - \frac{9}{25} \cdot \frac{5}{18} \right)^2 : \left(1 + \frac{1}{2} \right)^2 - \left(\frac{1}{10} \right)^2 \right] \cdot \left(\frac{7}{20} - 1 \right) + 3 - \frac{1}{4} + \frac{2}{3}}{\left[\left(1 - \frac{1}{3} - \frac{1}{2} \right) \cdot 2 + \left(\frac{2}{3} - \frac{1}{2} + \frac{1}{6} \right) \cdot 3 \right] : \frac{4}{3} + \frac{2}{3}} = \\
& = \frac{\left[\left(\frac{1}{4} - \frac{1}{10} \right)^2 : \left(\frac{2+1}{2} \right)^2 - \frac{1}{100} \right] \cdot \left(\frac{7-20}{20} \right) + 3 - \frac{1}{4} + \frac{2}{3}}{\left[\left(\frac{6-2-3}{6} \right) \cdot 2 + \left(\frac{4-3+1}{6} \right) \cdot 3 \right] \cdot \frac{3}{4} + \frac{2}{3}} = \\
& = \frac{\left[\left(\frac{5-2}{20} \right)^2 : \left(\frac{3}{2} \right)^2 - \frac{1}{100} \right] \cdot \left(-\frac{13}{20} \right) + 3 - \frac{1}{4} + \frac{2}{3}}{\left[\frac{1}{6} \cdot 2 + \frac{1}{3} \cdot 3 \right] \cdot \frac{3}{4} + \frac{2}{3}} = \\
& = \frac{\left[\left(\frac{3}{20} \right)^2 : \left(\frac{3}{2} \right)^2 - \frac{1}{100} \right] \cdot \left(-\frac{13}{20} \right) + 3 - \frac{1}{4} + \frac{2}{3}}{\left[\frac{1}{3} + 1 \right] \cdot \frac{3}{4} + \frac{2}{3}} = \\
& = \frac{\left[\frac{1}{100} - \frac{1}{100} \right] \cdot \left(-\frac{13}{20} \right) + 3 - \frac{1}{4} + \frac{2}{3}}{\left[\frac{1+3}{3} \right] \cdot \frac{3}{4} + \frac{2}{3}} = \\
& = \frac{0 + 3 - \frac{1}{4} + \frac{2}{3}}{\frac{4}{3} \cdot \frac{3}{4} + \frac{2}{3}} = \frac{36 - 3 + 8}{12} = \frac{41}{12} = \frac{41}{12} \cdot \frac{3}{5} = \\
& = \frac{41}{4} \cdot \frac{1}{5} = \frac{41}{20}.
\end{aligned}$$

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$$\begin{aligned}
& \frac{\frac{18}{4} \cdot \left(\frac{1}{6} - \frac{9}{36}\right) - \left[\frac{5}{6} \cdot \left(\frac{7}{5} - \frac{14}{40}\right) - \frac{1}{4} \cdot \left(\frac{8}{3} - 2^1 - \frac{1}{6}\right)\right] \cdot 2}{\left\{\left(2 + \frac{4}{16} + \frac{5}{12}\right)^2 : \left[\left(\frac{6}{5} - \frac{7}{21} - \frac{1}{5}\right)^{5-1} : \left(3^0 - \frac{1}{3}\right)^2\right]\right\} \cdot \frac{30}{32}} = \\
& \frac{\frac{9}{2} \cdot \left(\frac{1}{6} - \frac{3}{12}\right) - \left[\frac{5}{6} \cdot \left(\frac{7}{5} - \frac{7}{20}\right) - \frac{1}{4} \cdot \left(\frac{8}{3} - 2 - \frac{1}{6}\right)\right] \cdot 2}{\left\{\left(2 + \frac{1}{4} + \frac{5}{12}\right)^2 : \left[\left(\frac{6}{5} - \frac{1}{3} - \frac{1}{5}\right)^4 : \left(1 - \frac{1}{3}\right)^2\right]\right\} \cdot \frac{15}{16}} = \\
& \frac{\frac{9}{2} \cdot \left(\frac{2}{12} - \frac{3}{12}\right) - \left[\frac{5}{6} \cdot \left(\frac{28}{20} - \frac{7}{20}\right) - \frac{1}{4} \cdot \left(\frac{16-12-1}{6}\right)\right] \cdot 2}{\left\{\left(\frac{24}{12} + \frac{3}{12} + \frac{5}{12}\right)^2 : \left[\left(1 - \frac{1}{3}\right)^4 : \left(\frac{3-1}{3}\right)^2\right]\right\} \cdot \frac{15}{16}} = \\
& \frac{\frac{9}{2} \cdot \left(-\frac{1}{12}\right) - \left[\frac{5}{6} \cdot \frac{21}{20} - \frac{1}{4} \cdot \frac{1}{2}\right] \cdot 2}{\left\{\left(\frac{8}{3}\right)^2 : \left[\left(\frac{3-1}{3}\right)^4 : \left(\frac{2}{3}\right)^2\right]\right\} \cdot \frac{15}{16}} = \\
& \frac{-\frac{3}{8} - \left[\frac{7}{8} - \frac{1}{8}\right] \cdot 2}{\left\{\left(\frac{8}{3}\right)^2 : \left[\left(\frac{2}{3}\right)^4 : \left(\frac{2}{3}\right)^2\right]\right\} \cdot \frac{15}{16}} = \\
& \frac{-\frac{3}{8} - \left[\frac{3}{4}\right] \cdot 2}{\left\{\left(\frac{8}{3}\right)^2 : \left[\left(\frac{2}{3}\right)^2\right]\right\} \cdot \frac{15}{16}} = \frac{-\frac{3}{8} - \frac{3}{2}}{16 \cdot \frac{15}{16}} = \frac{-3-12}{15} = \\
& = -\frac{15}{8} \cdot \frac{1}{15} = -\frac{1}{8}.
\end{aligned} \tag{177}$$

$$\begin{aligned}
& \frac{\left[\left(2^1 - \frac{1}{2} \right) + \left(-2 + \frac{4}{12} \right) + \left(2^2 - \frac{1}{6} \right) - 6^0 \right] : 4 \cdot 2 - \frac{4}{3}}{\left\{ (-2)^2 + (-3)^3 - \left(\frac{14}{26} \right)^0 \right\} \cdot \left(-\frac{3}{15} \right)^2 - \frac{1}{25} \right\} \cdot \frac{9}{12}} = \\
& = \frac{\left[\left(2 - \frac{1}{2} \right) + \left(-2 + \frac{1}{3} \right) + \left(4 - \frac{1}{6} \right) - 1 \right] : 8 - \frac{4}{3}}{\left\{ (-2)^2 + (-3)^3 - \left(\frac{14}{26} \right)^0 \right\} \cdot \left(-\frac{1}{5} \right)^2 - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \\
& = \frac{\left[\left(\frac{4-1}{2} \right) + \left(\frac{-6+1}{3} \right) + \left(\frac{24-1}{6} \right) - 1 \right] : 8 - \frac{4}{3}}{\left\{ [4-27-1] \cdot \frac{1}{25} - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \tag{178} \\
& = \frac{\left[\frac{3}{2} - \frac{5}{3} + \frac{23}{6} - 1 \right] \cdot \frac{1}{8} - \frac{4}{3}}{\left\{ -24 \cdot \frac{1}{25} - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \frac{\left[\frac{9-10+23-6}{6} \right] \cdot \frac{1}{8} - \frac{4}{3}}{\left\{ -\frac{24}{25} - \frac{1}{25} \right\} \cdot \frac{3}{4}} = \\
& = \frac{\frac{8}{3} \cdot \frac{1}{8} - \frac{4}{3}}{-1 \cdot \frac{3}{4}} = \frac{\frac{1}{3} - \frac{4}{3}}{-1 \cdot \frac{3}{4}} = \\
& = -1 \cdot -\frac{4}{3} = \frac{4}{3}.
\end{aligned}$$

$$\begin{aligned}
& \left[\left(\frac{23}{30} - \frac{26}{36} \right) \cdot \left(\frac{23}{15} - \frac{4}{120} \right) \right] : \frac{3}{2} - 1^0 \\
& \frac{\left[\frac{13}{12} - \left(\frac{7}{9} - \frac{3}{9} \right) + \frac{2}{9} \right] - \left(-\frac{14}{36} + \frac{1}{12} + \frac{10}{12} \right) - \frac{4}{12} + 19^0}{\left[\left(\frac{23}{30} - \frac{13}{18} \right) \cdot \left(\frac{23}{15} - \frac{1}{30} \right) \right] : \frac{3}{2} - 1} = \\
& \frac{\left[\frac{13}{12} - \left(\frac{7}{9} - \frac{1}{3} \right) + \frac{2}{9} \right] - \left(-\frac{7}{18} + \frac{1}{12} + \frac{5}{6} \right) - \frac{1}{3} + 1}{\left[\left(\frac{69-65}{90} \right) \cdot \left(\frac{46-1}{30} \right) \right] : \frac{2}{3} - 1} = \\
& \frac{\left[\frac{13}{12} - \left(\frac{7-3}{9} \right) + \frac{2}{9} \right] - \left(\frac{-14+3+30}{36} \right) - \frac{1}{3} + 1}{\left[\frac{4}{90} \cdot \frac{45}{30} \right] : \frac{2}{3} - 1} = \frac{\frac{1}{15} \cdot \frac{2}{3} - 1}{\left[\frac{13}{12} - \frac{4}{9} + \frac{2}{9} \right] - \frac{19}{36} - \frac{1}{3} + 1} = \\
& \frac{\frac{2}{45} - 1}{\left[\frac{13}{12} - \frac{4}{9} + \frac{2}{9} \right] - \frac{19}{36} - \frac{1}{3} + 1} = \frac{\frac{2-45}{45}}{\left[\frac{13}{12} - \frac{2}{9} \right] - \frac{19}{36} - \frac{1}{3} + 1} = \\
& \frac{\frac{2}{45} - 1}{\left[\frac{39-8}{36} \right] - \frac{19}{36} - \frac{1}{3} + 1} = \frac{\frac{2-45}{45}}{\frac{31}{36} - \frac{19}{36} - \frac{1}{3} + 1} = \frac{-\frac{43}{45}}{\frac{12}{36} - \frac{1}{3} + 1} = \\
& \frac{-\frac{43}{45}}{\frac{12-12+36}{36}} = \frac{-\frac{43}{45}}{\frac{36}{36}} = -\frac{43}{45} \cdot 1 = -\frac{43}{45}.
\end{aligned}$$

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$$\begin{aligned}
& 2^2 + \frac{\left(\frac{6}{8} + \frac{2}{6} \cdot \frac{5}{2}\right) : \left(\frac{3}{5} + \frac{10}{6} - \frac{4}{4}\right) + \frac{10}{18} + \frac{2}{6} - 8^1 + \frac{4}{6} = \\
& \qquad \qquad \qquad \frac{\left(2 + \frac{2}{6}\right) \cdot \left(\frac{9}{12} - \frac{8}{14}\right) + \frac{8}{6} \cdot \frac{2}{5}}{\left(\frac{3}{4} + \frac{1}{3} \cdot \frac{5}{2}\right) : \left(\frac{3}{5} + \frac{5}{3} - 1\right) + \frac{5}{9} + \frac{1}{3} - 8 + \frac{2}{3} = \\
& = 4 + \frac{\left(\frac{3}{4} + \frac{5}{6}\right) : \left(\frac{9+25-15}{15}\right) + \frac{5+3}{9} - 8 + \frac{2}{3} = \\
& \qquad \qquad \qquad \frac{\left(\frac{6+1}{3}\right) \cdot \left(\frac{21-16}{28}\right) + \frac{8}{15}}{\left(\frac{9+10}{12}\right) : \frac{19}{15} + \frac{8}{9} + \frac{2}{3} = \\
& = -4 + \frac{\frac{19}{12} \cdot \frac{15}{19} + \frac{15}{9} + \frac{2}{3}}{\frac{7}{3} \cdot \frac{5}{28} + \frac{8}{15}} = -4 + 3 + \frac{15}{9} + \frac{2}{3} = \\
& = -4 + \frac{19}{12} \cdot \frac{15}{19} + \frac{15}{9} + \frac{2}{3} = -4 + 3 + \frac{15}{9} + \frac{2}{3} = \\
& = -1 + \frac{15}{9} + \frac{2}{3} = \frac{-27 + 45 + 18}{27} = \frac{4}{3}.
\end{aligned}
\tag{180}$$

$$\begin{aligned}
& \frac{2^1 + \frac{1}{64} \cdot \left(2^3 + \frac{2}{6}\right)^2 \cdot \left(2^3 - \frac{1}{2}\right) \cdot \left(-1^1 - \frac{2}{10}\right)^3 \cdot \frac{1}{9} \cdot \left(\frac{3}{5} - \frac{1}{5}\right)^2 - \frac{3}{9}}{\left(\frac{9}{24} - \frac{2}{24} + \frac{5}{6}\right) + \left\{-\frac{10}{16} + \left[\frac{15}{4} + \left(-\frac{30}{56} - 2 - \frac{6}{8} + \frac{2}{7}\right)\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 + \frac{1}{64} \cdot \left(8 + \frac{1}{3}\right)^2 \cdot \left(8 - \frac{1}{2}\right) \cdot \left(-1 - \frac{1}{5}\right)^3 \cdot \frac{1}{9} \cdot \left(1 - \frac{1}{5}\right)^2 - \frac{1}{3}}{\left(\frac{3}{8} - \frac{1}{12} + \frac{5}{6}\right) + \left\{-\frac{5}{8} + \left[\frac{15}{4} + \left(-\frac{15}{28} - 2 - \frac{3}{4} + \frac{2}{7}\right)\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 + \frac{1}{64} \cdot \left(\frac{24+1}{3}\right)^2 \cdot \left(\frac{16-1}{2}\right) \cdot \left(\frac{-5-1}{5}\right)^3 \cdot \frac{1}{9} \cdot \left(\frac{5-1}{5}\right)^2 - \frac{1}{3}}{\left(\frac{9-2+20}{24}\right) + \left\{-\frac{5}{8} + \left[\frac{15}{4} + \left(\frac{-15-56-21+8}{28}\right)\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 + \frac{1}{64} \cdot \left(\frac{25}{3}\right)^2 \cdot \frac{15}{2} \cdot \left(\frac{-6}{5}\right)^3 \cdot \frac{1}{9} \cdot \left(\frac{4}{5}\right)^2 - \frac{1}{3}}{\frac{27}{24} + \left\{-\frac{5}{8} + \left[\frac{15}{4} - \frac{84}{28}\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 + \frac{1}{64} \cdot \frac{625}{9} \cdot \frac{15}{2} \cdot \left(\frac{-216}{125}\right) \cdot \frac{1}{9} \cdot \frac{16}{255} - \frac{1}{3}}{\frac{9}{8} + \left\{-\frac{5}{8} + \left[\frac{15}{4} - 3\right]\right\}} - \frac{3}{5} = \\
& = \frac{2 - 1 - \frac{1}{3}}{\frac{9}{8} + \left\{-\frac{5}{8} + \left[\frac{15-12}{4}\right]\right\}} - \frac{3}{5} = \frac{1 - \frac{1}{3}}{\frac{9}{8} + \left\{-\frac{5}{8} + \frac{3}{4}\right\}} - \frac{3}{5} = \frac{\frac{3-1}{3}}{\frac{9}{8} - \frac{5}{8} + \frac{3}{4}} - \frac{3}{5} = \\
& = \frac{\frac{2}{3}}{\frac{4}{8} + \frac{3}{4}} - \frac{3}{5} = \frac{\frac{2}{3}}{\frac{10}{8}} - \frac{3}{5} = \frac{2}{3} \cdot \frac{8}{10} - \frac{3}{5} = \\
& = \frac{8}{15} - \frac{3}{5} = \frac{8-9}{15} = -\frac{1}{15}.
\end{aligned}$$

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STORIA DELLE REVISIONI

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