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Divulgazione Libera

Le espressioni con i numeri razionali

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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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Indice

1. 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*.

2. Le espressioni con i numeri razionali ($\mathbb{Q}$)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\begin{aligned}
&\left\{\left[\left(\frac{2}{3}-\frac{3}{18}\right)\cdot\frac{12}{8}-\frac{1}{4}\right]-\frac{1}{5}\cdot\left[(3\cdot5)\cdot\left(2-\frac{1}{3}\right)-\frac{5}{3}\right]\right\}+\frac{1}{4}-\frac{2}{3}+4=\\
&\left\{\left[\left(\frac{2}{3}-\frac{1}{6}\right)\cdot\frac{3}{2}-\frac{1}{4}\right]-\frac{1}{5}\cdot\left[15\cdot\left(2-\frac{1}{3}\right)-\frac{5}{3}\right]\right\}+\frac{1}{4}-\frac{2}{3}+4=\\
&\left\{\left[\left(\frac{4-1}{6}\right)\cdot\frac{3}{2}-\frac{1}{4}\right]-\frac{1}{5}\cdot\left[15\cdot\left(\frac{6-1}{3}\right)-\frac{5}{3}\right]\right\}+\frac{3-8+48}{12}=\\
&\left\{\left[\left(\frac{3}{6}\right)\cdot\frac{3}{2}-\frac{1}{4}\right]-\frac{1}{5}\cdot\left[15\cdot\frac{5}{3}-\frac{5}{3}\right]\right\}+\frac{43}{12}=\\
&\left\{\left[\frac{1}{2}\cdot\frac{3}{2}-\frac{1}{4}\right]-\frac{1}{5}\cdot\left[25-\frac{5}{3}\right]\right\}+\frac{43}{12}=\\
&\left\{\left[\frac{3}{4}-\frac{1}{4}\right]-\frac{1}{5}\cdot\left[\frac{75-5}{3}\right]\right\}+\frac{43}{12}=\\
&\left\{\frac{1}{2}-\frac{1}{5}\cdot\frac{70}{3}\right\}+\frac{43}{12}=\\
&\left\{\frac{1}{2}-\frac{14}{3}\right\}+\frac{43}{12}=\\
&\left\{\frac{3-28}{6}\right\}+\frac{43}{12}=\\
&\left\{-\frac{25}{6}\right\}+\frac{43}{12}=\\
&-\frac{25}{6}+\frac{43}{12}=\\
&\frac{-50+43}{12}=\\
&=-\frac{7}{12}.
\end{aligned}
\tag{27}
$$

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

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

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

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

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

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

$$
\begin{aligned}
&\frac{\left(7^0-\frac{1}{2}\right):\left(-\frac{9}{12}\right)}{4\cdot 1-\frac{2}{3}}+\frac{\left(\frac{2}{8}-\frac{1}{5}\right)\cdot(-60)}{\left(\frac{1}{2}-5\right):\left(-\frac{27}{10}\right)}= \\
&\frac{\left(1-\frac{1}{2}\right):\left(-\frac{3}{4}\right)}{4-\frac{2}{3}}+\frac{\left(\frac{1}{4}-\frac{1}{5}\right)\cdot(-60)}{\left(\frac{1}{2}-5\right):\left(-\frac{27}{10}\right)}= \\
&\frac{\left(\frac{2-1}{2}\right)\cdot\left(-\frac{4}{3}\right)}{\frac{12-2}{3}}+\frac{\left(\frac{5-4}{20}\right)\cdot(-60)}{\left(\frac{1-10}{2}\right)\cdot\left(-\frac{10}{27}\right)}= \\
&\frac{\frac{1}{2}\cdot\left(-\frac{4}{3}\right)}{\frac{10}{3}}+\frac{\frac{1}{20}\cdot(-60)}{\left(-\frac{9}{2}\right)\cdot\left(-\frac{10}{27}\right)}= \\
&-\frac{\frac{2}{3}}{\frac{10}{3}}-\frac{3}{5}= \\
&=-\frac{2}{3}\cdot\frac{3}{10}-3\cdot\frac{3}{5}= \\
&=-\frac{1}{5}-\frac{9}{5}= \\
&=-\frac{10}{5}= \\
&=-2.
\end{aligned}
\tag{34}
$$

$$
\begin{aligned}
&\frac{\frac{3}{7}\cdot\left(-\frac{4}{5}+\frac{3}{6}\right)}{\frac{1}{14}-\left(\frac{2}{7}-\frac{1}{4}\right)}\cdot\left(\frac{5}{9}-4^{0}\right)= \\
&\frac{\frac{3}{7}\cdot\left(-\frac{4}{5}+\frac{1}{2}\right)}{\frac{1}{14}-\left(\frac{2}{7}-\frac{1}{4}\right)}\cdot\left(\frac{5}{9}-1\right)= \\
&\frac{\frac{3}{7}\cdot\left(\frac{-8+5}{10}\right)}{\frac{1}{14}-\left(\frac{8-7}{28}\right)}\cdot\left(\frac{5-9}{9}\right)= \\
&\frac{\frac{3}{7}\cdot\left(-\frac{3}{10}\right)}{\frac{1}{14}-\frac{1}{28}}\cdot\left(-\frac{4}{9}\right)= \\
&-\frac{\frac{9}{70}}{\frac{2-1}{28}}\cdot\left(-\frac{4}{9}\right)= \\
&-\frac{\frac{9}{70}}{\frac{1}{28}}\cdot\left(-\frac{4}{9}\right)= \\
&-\frac{9}{70}\cdot 28\cdot\left(-\frac{4}{9}\right)= \\
&\frac{112}{70}= \\
&=\frac{8}{5}.
\end{aligned}
\tag{35}
$$

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

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

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

$$\frac{\frac{2-3}{6}}{-\frac{3}{2}+\frac{2}{3}}+\frac{\frac{2}{3}-\frac{1}{3}}{-\frac{1}{3}-\frac{2}{3}\cdot-\frac{1}{4}}=$$

$$\frac{-\frac{1}{6}}{\frac{-9+4}{6}}+\frac{\frac{1}{3}}{-\frac{1}{3}+\frac{2}{12}}=$$

$$\frac{-\frac{1}{6}}{-\frac{5}{6}}+\frac{\frac{1}{3}}{-\frac{1}{3}+\frac{1}{6}}=$$

$$\frac{1}{6}\cdot\frac{6}{5}+\frac{\frac{1}{3}}{\frac{-2+1}{6}}=$$

$$\frac{1}{5}+\frac{\frac{1}{3}}{-\frac{1}{6}}=$$

$$\frac{1}{5}+\frac{1}{3}\cdot(-6)=$$

$$\frac{1}{5}-2=$$

$$=\frac{1-10}{5}=$$

$$=-\frac{9}{5}.$$

(37)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\begin{aligned}
&\frac{\left(2-\frac{3}{5}-\frac{33}{15}\right)+\left(4^0+\frac{4}{3}-\frac{4}{8}:3-1+\frac{1}{6}\right)^3:\frac{5}{27}}{\left(2^0-\frac{1}{4}\right):\frac{3}{8}+\frac{25}{32}:\left(1-\frac{1}{2}:2^2-\frac{3}{2}:6\right)^2}= \\
&\frac{\left(2-\frac{3}{5}-\frac{33}{15}\right)+\left(1+\frac{4}{3}-\frac{1}{2}:3-1+\frac{1}{6}\right)^3:\frac{5}{27}}{\left(1-\frac{1}{4}\right):\frac{3}{8}+\frac{25}{32}:\left(1-\frac{1}{2}:4-\frac{3}{2}:6\right)^2}= \\
&\frac{\left(\frac{30-9-33}{15}\right)+\left(1+\frac{4}{3}-\frac{1}{2}\cdot\frac{1}{3}-1+\frac{1}{6}\right)^3\cdot\frac{27}{5}}{\left(\frac{4-1}{4}\right)\cdot\frac{8}{3}+\frac{25}{32}:\left(1-\frac{1}{2}\cdot\frac{1}{4}-\frac{3}{2}\cdot\frac{1}{6}\right)^2}= \\
&\frac{-\frac{12}{15}+\left(1+\frac{4}{3}-\frac{1}{6}-1+\frac{1}{6}\right)^3\cdot\frac{27}{5}}{\frac{3}{4}\cdot\frac{8}{3}+\frac{25}{32}:\left(1-\frac{1}{8}-\frac{1}{2}\cdot\frac{1}{2}\right)^2}= \\
&\frac{-\frac{12}{15}+\left(\frac{4}{3}\right)^3\cdot\frac{27}{5}}{2+\frac{25}{32}:\left(1-\frac{1}{8}-\frac{1}{4}\right)^2}= \\
&\frac{-\frac{12}{15}+\frac{64}{5}}{2+\frac{25}{32}:\left(\frac{8-1-2}{8}\right)^2}= \\
&\frac{\frac{-12+192}{15}}{2+\frac{25}{32}:\left(\frac{5}{8}\right)^2}= \\
&\frac{\frac{180}{15}}{2+\frac{25}{32}:\frac{25}{64}}= \\
&\frac{12}{2+\frac{25}{32}\cdot\frac{64}{25}}= \\
&\frac{12}{2+2}= \\
&=\frac{12}{4}= \\
&=3.
\end{aligned}
\tag{70}
$$

$$\begin{aligned} &3^2 \cdot 3^{-5} \cdot 3^4 \cdot 3^{-1} \cdot 4^0 = \\ &= 3^0 \cdot 1 = \\ &= 1. \end{aligned} \tag{71}$$

$$\begin{aligned} &2^{-6} : 2^{-4} = \\ &= 2^{-2} = \\ &= \left(\frac{1}{2}\right)^2 = \\ &= \frac{1}{4}. \end{aligned} \tag{72}$$

$$\begin{aligned} &1 \cdot 4^{-1} \cdot 5^{-1} \cdot (2)^{-1} = \\ &= \frac{1}{4} \cdot \frac{1}{5} \cdot \left(-\frac{1}{2}\right) = \\ &= -\frac{1}{40}. \end{aligned} \tag{73}$$

$$\begin{aligned} &16^{-2} : 8^{-2} = \\ &= 2^{-2} = \\ &= \left(\frac{1}{2}\right)^2 = \\ &= \frac{1}{4}. \end{aligned} \tag{74}$$

$$\begin{aligned} &\left[(-3)^{-3}\right]^2 = \\ &= (-3)^{-6} = \\ &= \left(-\frac{1}{3}\right)^6 = \\ &= \left(\frac{1}{3}\right)^6 = \\ &= \frac{1}{3^6}. \end{aligned} \tag{75}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\begin{aligned}
\left(-\frac{5}{2}\right)^2-\left\{\left[\left(-\frac{4}{10}\right)^2:\left(-\frac{4}{10}\right)+\left(-\frac{1}{2}\right)^2\right]:\left(3^0-\frac{7}{10}\right)-6^0+\frac{1}{2}\right\}^2\cdot\left(-\frac{10}{4}\right)^{-2}-2= \\
\left(-\frac{5}{2}\right)^2-\left\{\left[\left(-\frac{2}{5}\right)^2:\left(-\frac{2}{5}\right)+\left(-\frac{1}{2}\right)^2\right]:\left(1-\frac{7}{10}\right)-1+\frac{1}{2}\right\}^2\cdot\left(-\frac{5}{2}\right)^{-2}-2= \\
\frac{25}{4}-\left\{\left[\left(-\frac{2}{5}\right)^1+\frac{1}{4}\right]:\left(\frac{10-7}{10}\right)-1+\frac{1}{2}\right\}^2\cdot\left(-\frac{2}{5}\right)^2-2= \\
\frac{25}{4}-\left\{\left[-\frac{2}{5}+\frac{1}{4}\right]:\frac{3}{10}-1+\frac{1}{2}\right\}^2\cdot\frac{4}{25}-2= \\
\frac{25}{4}-\left\{\left[\frac{-8+5}{20}\right]:\frac{3}{10}-1+\frac{1}{2}\right\}^2\cdot\frac{4}{25}-2= \\
\frac{25}{4}-\left\{\left[-\frac{3}{20}\right]\cdot\frac{10}{3}-1+\frac{1}{2}\right\}^2\cdot\frac{4}{25}-2= \\
\frac{25}{4}-\left\{-\frac{1}{2}-1+\frac{1}{2}\right\}^2\cdot\frac{4}{25}-2= \\
\frac{25}{4}-\{-1\}^2\cdot\frac{4}{25}-2= \\
\frac{25}{4}-\{1\}\cdot\frac{4}{25}-2= \\
\frac{25}{4}-1\cdot\frac{4}{25}-2= \\
\frac{25}{4}-\frac{4}{25}-2= \\
\frac{625-16-200}{100}= \\
=\frac{409}{100}.
\end{aligned}
\tag{89}
$$

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

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

$$
\begin{aligned}
\left(-\frac{6}{4}\right)^{-3}+\left\{\left[\left(-\frac{2}{3}\right)^{3}:\frac{6}{9}+\left(\frac{1}{2}\right)^{2}\right]:\left(3^{0}-\frac{7}{6}\right)-1-\frac{1}{2}\right\}^{3}\cdot\left(-\frac{1}{2}\right)^{-3}+6^{0}= \\
\left(-\frac{3}{2}\right)^{-3}+\left\{\left[\left(-\frac{2}{3}\right)^{3}:\frac{2}{3}+\left(\frac{1}{2}\right)^{2}\right]:\left(1-\frac{7}{6}\right)-1-\frac{1}{2}\right\}^{3}\cdot\left(-\frac{1}{2}\right)^{-3}+1= \\
\left(-\frac{2}{3}\right)^{3}+\left\{\left[-\left(\frac{2}{3}\right)^{2}+\frac{1}{4}\right]:\left(\frac{6-7}{6}\right)-1-\frac{1}{2}\right\}^{3}\cdot(-2)^{3}+1= \\
-\frac{8}{27}+\left\{\left[-\frac{4}{9}+\frac{1}{4}\right]:\left(-\frac{1}{6}\right)-1-\frac{1}{2}\right\}^{3}\cdot(-8)+1= \\
-\frac{8}{27}+\left\{\left[\frac{-16+9}{36}\right]\cdot(-6)-1-\frac{1}{2}\right\}^{3}\cdot(-8)+1= \\
-\frac{8}{27}+\left\{-\frac{7}{36}\cdot(-6)-1-\frac{1}{2}\right\}^{3}\cdot(-8)+1= \\
-\frac{8}{27}+\left\{\frac{7}{6}-1-\frac{1}{2}\right\}^{3}\cdot(-8)+1= \\
-\frac{8}{27}+\left\{\frac{7-6-3}{6}\right\}^{3}\cdot(-8)+1= \\
-\frac{8}{27}+\left\{-\frac{2}{6}\right\}^{3}\cdot(-8)+1= \\
-\frac{8}{27}+\left\{-\frac{1}{3}\right\}^{3}\cdot(-8)+1= \\
-\frac{8}{27}-\frac{1}{27}\cdot(-8)+1= \\
=-\frac{8}{27}+\frac{8}{27}+1= \\
=1.
\end{aligned}
\tag{92}
$$

$$
\begin{aligned}
&\left(\frac{1}{11}-\frac{2}{66}-\frac{1}{3}\right)\cdot\left\{\left(-\frac{1}{3}\right)^{-2}-15-\left[2\cdot 3^{0}+\left(-\frac{5}{3}\right)^{-1}:\left(2^{0}-\frac{1}{2}+1-\frac{3}{5}\right)\right]\right\}-\left(\frac{2}{3}\right)^{0}= \\
&\left(\frac{1}{11}-\frac{1}{33}-\frac{1}{3}\right)\cdot\left\{\left(-\frac{1}{3}\right)^{-2}-15-\left[2+\left(-\frac{5}{3}\right)^{-1}:\left(1-\frac{1}{2}+1-\frac{3}{5}\right)\right]\right\}-1= \\
&\left(\frac{3-1-11}{33}\right)\cdot\left\{(-3)^{2}-15-\left[2+\left(-\frac{3}{5}\right):\left(\frac{10-5+10-6}{10}\right)\right]\right\}-1= \\
&\left(-\frac{9}{33}\right)\cdot\left\{9-15-\left[2+\left(-\frac{3}{5}\right):\left(\frac{9}{10}\right)\right]\right\}-1= \\
&\left(-\frac{3}{11}\right)\cdot\left\{-6-\left[2-\frac{3}{5}\cdot\frac{10}{9}\right]\right\}-1= \\
&\left(-\frac{3}{11}\right)\cdot\left\{-6-\left[2-\frac{2}{3}\right]\right\}-1= \\
&\left(-\frac{3}{11}\right)\cdot\left\{-6-\left[\frac{6-2}{3}\right]\right\}-1= \\
&\left(-\frac{3}{11}\right)\cdot\left\{-6-\frac{4}{3}\right\}-1= \\
&\left(-\frac{3}{11}\right)\cdot\left\{\frac{-18-4}{3}\right\}-1= \\
&\left(-\frac{3}{11}\right)\cdot\left\{-\frac{22}{3}\right\}-1= \\
&=2-1= \\
&=1.
\end{aligned}
\tag{93}
$$

$$
\begin{aligned}
&\left\{\left[\left(2-\frac{3}{2}+\frac{2}{5}\right)\cdot 10^{-1}+\frac{3}{50}\right]:\left(-\frac{10}{8}\right)^{-2}\right\}\cdot\left(2\cdot 1+\frac{2}{5}-\frac{21}{6}-6^{0}+\frac{1}{2}\right)+\frac{7}{5}= \\
&\left\{\left[\left(\frac{20-15+4}{10}\right)\cdot\frac{1}{10}+\frac{3}{50}\right]:\left(-\frac{4}{5}\right)^{2}\right\}\cdot\left(\frac{20+4-35-10+5}{10}\right)+\frac{7}{5}= \\
&\left\{\left[\frac{9}{10}\cdot\frac{1}{10}+\frac{3}{50}\right]:\left(\frac{4}{5}\right)^{2}\right\}\cdot\left(-\frac{16}{10}\right)+\frac{7}{5}= \\
&\left\{\left[\frac{9}{100}+\frac{3}{50}\right]:\left(\frac{4}{5}\right)^{2}\right\}\cdot\left(-\frac{8}{5}\right)+\frac{7}{5}= \\
&\left\{\left[\frac{9+6}{100}\right]:\frac{16}{25}\right\}\cdot\left(-\frac{8}{5}\right)+\frac{7}{5}= \\
&\left\{\frac{15}{100}\cdot\frac{25}{16}\right\}\cdot\left(-\frac{8}{5}\right)+\frac{7}{5}= \\
&\frac{15}{64}\cdot\left(-\frac{8}{5}\right)+\frac{7}{5}= \\
&-\frac{3}{8}+\frac{7}{5}= \\
&=\frac{-15+56}{20}= \\
&=\frac{41}{40}.
\end{aligned}
\tag{94}
$$

$$
\begin{aligned}
\left(4^0-\frac{5}{6}+\frac{8}{6}\right)\cdot\left\{\left(1-\frac{4}{9}\right):\left[2-\left(3^0-\frac{1}{4}-\frac{11}{6}\right)\cdot\left(-\frac{13}{6}\right)^{-1}-1\right]^2-\left(\frac{18}{46}\right)^{-1}\right\}^3+\frac{1}{6}= \\
\left(1-\frac{5}{6}+\frac{4}{3}\right)\cdot\left\{\left(1-\frac{4}{9}\right):\left[2-\left(1-\frac{1}{4}-\frac{11}{6}\right)\cdot\left(-\frac{13}{6}\right)^{-1}-1\right]^2-\left(\frac{9}{23}\right)^{-1}\right\}^3+\frac{1}{6}= \\
\left(\frac{6-5+8}{6}\right)\cdot\left\{\left(\frac{9-4}{9}\right):\left[2-\left(\frac{12-3-22}{12}\right)\cdot\left(-\frac{6}{13}\right)-1\right]^2-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{9}{6}\cdot\left\{\frac{5}{9}:\left[2-\left(-\frac{13}{12}\right)\cdot\left(-\frac{6}{13}\right)-1\right]^2-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{\frac{5}{9}:\left[2-\left(+\frac{1}{2}\right)-1\right]^2-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{\frac{5}{9}:\left[2-\frac{1}{2}-1\right]^2-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{\frac{5}{9}:\left[1-\frac{1}{2}\right]^2-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{\frac{5}{9}:\left[\frac{2-1}{2}\right]^2-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{\frac{5}{9}:\left[\frac{1}{2}\right]^2-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{\frac{5}{9}:\frac{1}{4}-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{\frac{5}{9}\cdot 4-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{\frac{20}{9}-\frac{23}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{-\frac{3}{9}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{-\frac{1}{3}\right\}^3+\frac{1}{6}= \\
\frac{3}{2}\cdot\left\{-\frac{1}{27}\right\}+\frac{1}{6}= \\
-\frac{1}{18}+\frac{1}{6}= \\
=\frac{-1+3}{18}= \\
=\frac{2}{18}= \\
=\frac{1}{9}.
\end{aligned}
\tag{95}
$$

$$
\begin{aligned}
\left(2^1-\frac{4}{5}\right)^2:\left\{\left[\frac{1}{3}+3^0-\frac{1}{12}-\frac{13}{12}\cdot\left(-\frac{10}{18}\right)^{-1}\right]\cdot\left[\frac{3^2}{6}-\frac{(1-5)^2}{6}+\frac{(-2)^2}{6}\right]\right\}&=\\
\left(\frac{10-4}{5}\right)^2:\left\{\left[\frac{1}{3}+1-\frac{1}{12}-\frac{13}{12}\cdot\left(-\frac{9}{5}\right)\right]\cdot\left[\frac{9}{6}-\frac{(-4)^2}{6}+\frac{4}{6}\right]\right\}&=\\
\left(\frac{6}{5}\right)^2:\left\{\left[\frac{1}{3}+1-\frac{1}{12}+\frac{39}{20}\right]\cdot\left[\frac{3}{2}-\frac{16}{6}+\frac{4}{6}\right]\right\}&=\\
\frac{36}{25}:\left\{\left[\frac{20+60-5+117}{60}\right]\cdot\left[\frac{3}{2}-\frac{8}{3}+\frac{2}{3}\right]\right\}&=\\
\frac{36}{25}:\left\{\frac{192}{60}\cdot\left[\frac{3}{2}-\frac{6}{3}\right]\right\}&=\\
\frac{36}{25}:\left\{\frac{16}{5}\cdot\left[\frac{9-12}{6}\right]\right\}&=\\
\frac{36}{25}:\left\{\frac{16}{5}\cdot\left[-\frac{1}{2}\right]\right\}&=\\
\frac{36}{25}:\left\{-\frac{8}{5}\right\}&=\\
\frac{36}{25}\cdot\left\{-\frac{5}{8}\right\}&=\\
=-\frac{9}{10}.&
\end{aligned}
\tag{96}
$$

$$
\begin{aligned}
\left[\frac{25^3}{75^2}-2\cdot\left(-\frac{10}{6}\right)^2-\frac{21}{27}\right]+\left[\left(-\frac{16}{6}\right)^{-2}\cdot\left(\frac{8}{54}\right)^{-3}\right]^{-1}\cdot\left(-\frac{3}{2}\right)^{10}&=\\
\left[\frac{25^3}{75^2}-2\cdot\left(-\frac{5}{3}\right)^2-\frac{7}{9}\right]+\left[\left(-\frac{8}{3}\right)^{-2}\cdot\left(\frac{4}{27}\right)^{-3}\right]^{-1}\cdot\left(-\frac{3}{2}\right)^{10}&=\\
\left[\frac{25^3}{75^2}-2\cdot\left(\frac{25}{9}\right)-\frac{7}{9}\right]+\left[\left(-\frac{3}{8}\right)^2\cdot\left(\frac{27}{4}\right)^3\right]^{-1}\cdot\left(\frac{3}{2}\right)^{10}&=\\
\left[\frac{25^3}{75^2}-\frac{50}{9}-\frac{7}{9}\right]+\left[\frac{9}{64}\cdot\frac{27^3}{64}\right]^{-1}\cdot\left(\frac{3}{2}\right)^{10}&=\\
\left[\frac{15625}{5625}-\frac{50}{9}-\frac{7}{9}\right]+\left[\frac{9}{64}\cdot\frac{19683}{64}\right]^{-1}\cdot\left(\frac{3}{2}\right)^{10}&=\\
\left[\frac{25}{9}-\frac{50}{9}-\frac{7}{9}\right]+\left[\frac{177147}{4096}\right]^{-1}\cdot\left(\frac{3}{2}\right)^{10}&=\\
-\frac{32}{9}+\frac{4096}{177147}\cdot\frac{59049}{1024}&=\\
-\frac{32}{9}+\frac{4}{3}&=\\
=\frac{-32+12}{9}&=\\
=-\frac{20}{9}.&
\end{aligned}
\tag{97}
$$

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

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

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

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

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

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

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

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

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

$$
\begin{aligned}
&\left(3^1-\frac{2}{8}+\frac{2}{3}-6^0\right)-3+1+\left(3-\frac{1}{2}+1,\overline{6}-1\right)-\left(\frac{8}{24}+\frac{2}{3}-\frac{2}{8}\right)-0,8\overline{3}=\\
&\left(3-\frac{1}{4}+\frac{2}{3}-1\right)-2+\left(3-\frac{1}{2}+1,\overline{6}-1\right)-\left(\frac{1}{3}+\frac{2}{3}-\frac{1}{4}\right)-0,8\overline{3}=\\
&\left(\frac{36-3+8-12}{12}\right)-2+\left(3-\frac{1}{2}+\frac{16-1}{9}-1\right)-\left(\frac{4+8-3}{12}\right)-\frac{83-8}{90}=\\
&\frac{29}{12}-2+\left(3-\frac{1}{2}+\frac{15}{9}-1\right)-\left(\frac{9}{12}\right)-\frac{75}{90}=\\
&\frac{29}{12}-2+\left(3-\frac{1}{2}+\frac{5}{3}-1\right)-\left(\frac{3}{4}\right)-\frac{5}{6}=\\
&\frac{29}{12}-2+\left(\frac{18-3+10-6}{6}\right)-\frac{3}{4}-\frac{5}{6}=\\
&\frac{29}{12}-2+\frac{19}{6}-\frac{3}{4}-\frac{5}{6}=\\
&\frac{29-24+38-9-10}{12}=\\
&=\frac{24}{12}=\\
&=2.
\end{aligned}
\tag{107}
$$

$$
\begin{aligned}
&\left(0,40-\frac{3}{21}\right)-\left[\frac{4}{3}-0,\overline{3}-\left(2^0+\frac{8}{14}\right)\right]-\left(\frac{1}{5}+\frac{1}{7}\right)-3\cdot 2+3^1=\\
&\left(0,4-\frac{1}{7}\right)-\left[\frac{4}{3}-0,\overline{3}-\left(1+\frac{4}{7}\right)\right]-\left(\frac{1}{5}+\frac{1}{7}\right)-6+3=\\
&\left(\frac{4}{10}-\frac{1}{7}\right)-\left[\frac{4}{3}-\frac{3-0}{9}-\left(\frac{7+4}{7}\right)\right]-\left(\frac{7+5}{35}\right)-3=\\
&\left(\frac{2}{5}-\frac{1}{7}\right)-\left[\frac{4}{3}-\frac{1}{3}-\frac{11}{7}\right]-\frac{12}{35}-3=\\
&\left(\frac{14-5}{35}\right)-\left[\frac{3}{3}-\frac{11}{7}\right]-\frac{12}{35}-3=\\
&\frac{9}{35}-\left[1-\frac{11}{7}\right]-\frac{12}{35}-3=\\
&\frac{9}{35}-\left[\frac{7-11}{7}\right]-\frac{12}{35}-3=\\
&\frac{9}{35}-\left[-\frac{4}{7}\right]-\frac{12}{35}-3=\\
&\frac{9}{35}+\frac{4}{7}-\frac{12}{35}-3=\\
&\frac{9+20-12-105}{35}=\\
&=-\frac{88}{35}.
\end{aligned}
\tag{108}
$$

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

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

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

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

$$
\begin{aligned}
5^1+\frac{6}{8}-5-\frac{2}{3}+0,1250-\left[5-\left(\frac{2}{3}+4^1-\frac{1}{6}\right)\right]+\left[2-\left(\frac{2}{16}+\frac{4}{3}+3^0\right)\right] &= \\
\frac{3}{4}-\frac{2}{3}+0,125-\left[5-\left(\frac{2}{3}+4-\frac{1}{6}\right)\right]+\left[2-\left(\frac{1}{8}+\frac{4}{3}+1\right)\right] &= \\
\frac{3}{4}-\frac{2}{3}+\frac{125}{1000}-\left[5-\left(\frac{4+24-1}{6}\right)\right]+\left[2-\left(\frac{3+32+24}{24}\right)\right] &= \\
\frac{3}{4}-\frac{2}{3}+\frac{1}{8}-\left[5-\frac{9}{2}\right]+\left[2-\frac{59}{24}\right] &= \\
\frac{3}{4}-\frac{2}{3}+\frac{1}{8}-\left[\frac{10-9}{2}\right]+\left[\frac{48-59}{24}\right] &= \\
\frac{3}{4}-\frac{2}{3}+\frac{1}{8}-\frac{1}{2}-\frac{11}{24} &= \\
\frac{18-16+3-12-11}{24} &= \\
=-\frac{18}{24} &= \\
=-\frac{3}{4}. &
\end{aligned}
\tag{113}
$$

$$
\begin{aligned}
0^3+\left\{\left[(0,80)^3\cdot(0,\overline{5})^{4-1}\right]\cdot(0,6)^6\right\}\cdot 5^{2\cdot 2} &= \\
0+\left\{\left[(0,8)^3\cdot(0,\overline{5})^3\right]\cdot(0,6)^6\right\}\cdot 5^4 &= \\
\left\{\left[\left(\frac{8}{10}\right)^3\cdot\left(\frac{5-0}{9}\right)^3\right]\cdot\left(\frac{6}{10}\right)^6\right\}\cdot 5^4 &= \\
\left\{\left[\left(\frac{4}{5}\right)^3\cdot\left(\frac{5}{9}\right)^3\right]\cdot\left(\frac{3}{5}\right)^6\right\}\cdot 5^4 &= \\
\left\{\left[\left(\frac{20}{45}\right)^3\right]\cdot\left(\frac{3}{5}\right)^6\right\}\cdot 5^4 &= \\
\left\{\left[\left(\frac{4}{9}\right)^3\right]\cdot\left(\frac{3}{5}\right)^6\right\}\cdot 5^4 &= \\
\left\{\left[\left(\frac{2}{3}\right)^2\right]^3\cdot\left(\frac{3}{5}\right)^6\right\}\cdot 5^4 &= \\
\left\{\left(\frac{2}{3}\right)^6\cdot\left(\frac{3}{5}\right)^6\right\}\cdot 5^4 &= \\
\left\{\left(\frac{6}{15}\right)^6\right\}\cdot 5^4 &= \\
\left\{\left(\frac{2}{5}\right)^6\right\}\cdot 5^4 &= \\
\left(\frac{2}{5}\right)^6\cdot 5^4 &= \\
\frac{2^6}{5^2} &= \\
=\frac{64}{25}. &
\end{aligned}
\tag{114}
$$

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

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

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

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

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

$$
\begin{aligned}
&\left\{\left[\left(\frac{4}{10}-\frac{1}{3}\right)\cdot\left(\frac{8}{6}-3^1\right)+\left(\frac{8}{20}-\frac{2}{3}\right)\cdot\left(\frac{1}{2}-\frac{8}{6}\right)\right]\cdot(8-5)\right\}\cdot\frac{2}{4}-\frac{1}{12}+1=\\
&\left\{\left[\left(\frac{2}{5}-\frac{1}{3}\right)\cdot\left(\frac{4}{3}-3\right)+\left(\frac{2}{5}-\frac{2}{3}\right)\cdot\left(\frac{1}{2}-\frac{4}{3}\right)\right]\cdot 3\right\}\cdot\frac{2}{4}-\frac{1}{12}+1=\\
&\left\{\left[\left(\frac{6-5}{15}\right)\cdot\left(\frac{4-9}{3}\right)+\left(\frac{6-10}{15}\right)\cdot\left(\frac{3-8}{6}\right)\right]\cdot 3\right\}\cdot\frac{1}{2}-\frac{1}{12}+1=\\
&\left\{\left[\frac{1}{15}\cdot\left(-\frac{5}{3}\right)+\left(-\frac{4}{15}\right)\cdot\left(-\frac{5}{6}\right)\right]\cdot 3\right\}\cdot\frac{1}{2}-\frac{1}{12}+1=\\
&\left\{\left[-\frac{1}{9}+\frac{2}{9}\right]\cdot 3\right\}\cdot\frac{1}{2}-\frac{1}{12}+1=\\
&\left\{\left[\frac{1}{9}\right]\cdot 3\right\}\cdot\frac{1}{2}-\frac{1}{12}+1=\\
&\frac{1}{3}\cdot\frac{1}{2}-\frac{1}{12}+1=\\
&\frac{1}{6}-\frac{1}{12}+1=\\
&\frac{2-1+12}{12}=\\
&=\frac{13}{12}.
\end{aligned}
\tag{120}
$$

$$
\begin{aligned}
&\left\{\left[\left(\frac{6}{12}-\frac{3}{5}\right):\left(\frac{1}{5}-\frac{6}{9}\right)-\left(\frac{2}{14}-\frac{1}{5}\right):\left(\frac{2}{3}-\frac{4}{7}\right)\right]\right\}\cdot\frac{7}{3}-8^{0}\cdot 2^{1}-\frac{8}{10}= \\
&\left\{\left[\left(\frac{2}{4}-\frac{3}{5}\right):\left(\frac{1}{5}-\frac{2}{3}\right)-\left(\frac{1}{7}-\frac{1}{5}\right):\left(\frac{2}{3}-\frac{4}{7}\right)\right]\right\}\cdot\frac{7}{3}-1\cdot 2-\frac{4}{5}= \\
&\left\{\left[\left(\frac{10-12}{20}\right):\left(\frac{3-10}{15}\right)-\left(\frac{5-7}{35}\right):\left(\frac{14-12}{21}\right)\right]\right\}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&\left\{\left[\left(-\frac{2}{20}\right):\left(-\frac{7}{15}\right)-\left(-\frac{2}{35}\right):\left(\frac{2}{21}\right)\right]\right\}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&\left\{\left[\left(-\frac{1}{10}\right):\left(-\frac{7}{15}\right)-\left(-\frac{2}{35}\right)\cdot\left(\frac{21}{2}\right)\right]\right\}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&=\left\{\left[\left(-\frac{1}{10}\right)\cdot\left(-\frac{15}{7}\right)-\left(-\frac{1}{5}\right)\cdot\left(\frac{3}{1}\right)\right]\right\}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&\left\{\left[\left(-\frac{1}{2}\right)\cdot\left(-\frac{3}{7}\right)-\left(-\frac{3}{5}\right)\right]\right\}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&\left\{\left[\frac{3}{14}+\frac{3}{5}\right]\right\}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&\left\{\left[\frac{15+42}{70}\right]\right\}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&\left\{\left[\frac{57}{70}\right]\right\}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&\frac{57}{70}\cdot\frac{7}{3}-2-\frac{4}{5}= \\
&\frac{19}{10}-2-\frac{4}{5}= \\
&\frac{19-20-8}{10}= \\
&=-\frac{9}{10}.
\end{aligned}
\tag{121}
$$

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

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

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

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

$$
\begin{aligned}
&\left\{\left[\left(\frac{4}{6}-\frac{6}{16}\right):\left(\frac{2}{3}-\frac{9}{12}\right)-\frac{5}{4}\right]\cdot 2^1+\frac{3}{2}\right\}:\left(-\frac{8}{3}\right)-0{,}50-\left(\frac{1}{16}+1{,}8750\right)= \\
&\quad\left\{\left[\left(\frac{2}{3}-\frac{3}{8}\right):\left(\frac{2}{3}-\frac{3}{4}\right)-\frac{5}{4}\right]\cdot 2^1+\frac{3}{2}\right\}:\left(-\frac{8}{3}\right)-0{,}5-\left(\frac{1}{16}+1{,}875\right) \\
&\quad\left\{\left[\left(\frac{16-9}{24}\right):\left(\frac{8-9}{12}\right)-\frac{5}{4}\right]\cdot 2+\frac{3}{2}\right\}\cdot\left(-\frac{3}{8}\right)-\frac{5}{10}-\left(\frac{1}{16}+\frac{1875}{1000}\right)= \\
&\quad\left\{\left[\left(\frac{7}{24}\right):\left(-\frac{1}{12}\right)-\frac{5}{4}\right]\cdot 2+\frac{3}{2}\right\}\cdot\left(-\frac{3}{8}\right)-\frac{1}{2}-\left(\frac{1}{16}+\frac{15}{8}\right)= \\
&\quad\left\{\left[\frac{7}{24}\cdot(-12)-\frac{5}{4}\right]\cdot 2+\frac{3}{2}\right\}\cdot\left(-\frac{3}{8}\right)-\frac{1}{2}-\left(\frac{1}{16}+\frac{15}{8}\right)= \\
&\quad\left\{\left[-\frac{7}{2}-\frac{5}{4}\right]\cdot 2+\frac{3}{2}\right\}\cdot\left(-\frac{3}{8}\right)-\frac{1}{2}-\left(\frac{1}{16}+\frac{15}{8}\right)= \\
&\quad\left\{\left[\frac{-14-5}{4}\right]\cdot 2+\frac{3}{2}\right\}\cdot\left(-\frac{3}{8}\right)-\frac{1}{2}-\left(\frac{1}{16}+\frac{15}{8}\right)= \\
&\quad\left\{\left[-\frac{19}{4}\right]\cdot 2+\frac{3}{2}\right\}\cdot\left(-\frac{3}{8}\right)-\frac{1}{2}-\left(\frac{1}{16}+\frac{15}{8}\right)= \\
&\quad\left\{-\frac{19}{2}+\frac{3}{2}\right\}\cdot\left(-\frac{3}{8}\right)-\frac{1}{2}-\left(\frac{1}{16}+\frac{15}{8}\right)= \\
&\quad -8\cdot\left(-\frac{3}{8}\right)-\frac{1}{2}-\left(\frac{1}{16}+\frac{15}{8}\right)= \\
&\quad 3-\frac{1}{2}-\left(\frac{1}{16}+\frac{15}{8}\right)= \\
&\quad 3-\frac{1}{2}-\frac{1}{16}-\frac{15}{8}= \\
&\quad \frac{48-8-1-30}{16}= \\
&\quad =\frac{9}{16}.
\end{aligned}
\tag{126}
$$

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

$$\left[(-3)^{-2}-\left(\frac{2}{3}\right)^{4-1}-\left(-\frac{3}{9}+\frac{1}{2}+4^{0}-\frac{10}{12}\right)^{3}:\left(2^{0}+\frac{1}{6}-\frac{3}{2}\right)^{2}\right]:\left[-\frac{1}{3}-\left(-\frac{3}{2}\right)^{-3}:\frac{6}{27}+\left(-1^{1}-\frac{1}{9}\right)\cdot\left(-\frac{25}{15}\right)\right]=$$

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

$$\left[\left(-\frac{1}{3}\right)^{2}-\frac{8}{27}-\left(\frac{-2+3+6-5}{6}\right)^{3}:\left(\frac{6+1-9}{6}\right)^{2}\right]:\left[-\frac{1}{3}-\left(-\frac{2}{3}\right)^{3}\cdot\frac{9}{2}+\left(\frac{-9-1}{9}\right)\cdot\left(-\frac{5}{3}\right)\right]=$$

$$\left[\frac{1}{9}-\frac{8}{27}-\left(\frac{2}{6}\right)^{3}:\left(-\frac{2}{6}\right)^{2}\right]:\left[-\frac{1}{3}+\frac{8}{27}\cdot\frac{9}{2}-\frac{10}{9}\cdot\left(-\frac{5}{3}\right)\right]=$$

$$\left[\frac{1}{9}-\frac{8}{27}-\left(\frac{1}{3}\right)^{3}:\left(-\frac{1}{3}\right)^{2}\right]:\left[-\frac{1}{3}+\frac{4}{3}+\frac{50}{27}\right]=$$

$$\left[\frac{1}{9}-\frac{8}{27}-\frac{1}{27}:\frac{1}{9}\right]:\left[\frac{3}{3}+\frac{50}{27}\right]=$$

$$\left[\frac{1}{9}-\frac{8}{27}-\frac{1}{27}\cdot 9\right]:\left[1+\frac{50}{27}\right]=$$

$$\left[\frac{1}{9}-\frac{8}{27}-\frac{1}{3}\right]:\left[\frac{27+50}{27}\right]=$$

$$\left[\frac{3-8-9}{27}\right]:\left[\frac{77}{27}\right]=$$

$$-\frac{14}{27}\cdot\frac{27}{77}=$$

$$=-\frac{14}{77}=$$

$$=-\frac{2}{11}.$$

(128)

$$\frac{(2^1-1,600)\cdot\left(\frac{51}{135}-0,10\right)+\frac{22}{26}\cdot 0,\overline{39}}{\left(0,\overline{7}-\frac{37}{63}\right)^2:\frac{2}{98}+2^0+0,\overline{2}}\cdot 0,45+\frac{2}{10}=$$

$$\frac{(2-1,6)\cdot\left(\frac{17}{45}-0,1\right)+\frac{11}{13}\cdot 0,\overline{39}}{\left(0,\overline{7}-\frac{37}{63}\right)^2:\frac{1}{49}+1+0,\overline{2}}\cdot 0,45+\frac{2}{10}=$$

$$\frac{\left(2-\frac{16}{10}\right)\cdot\left(\frac{17}{45}-\frac{1}{10}\right)+\frac{11}{13}\cdot\frac{39-0}{99}}{\left(\frac{7-0}{9}-\frac{37}{63}\right)^2\cdot 49+1+\frac{2-0}{9}}\cdot\frac{45}{100}+\frac{2}{10}=$$

$$\frac{\left(2-\frac{8}{5}\right)\cdot\left(\frac{17}{45}-\frac{1}{10}\right)+\frac{11}{13}\cdot\frac{39}{99}}{\left(\frac{7}{9}-\frac{37}{63}\right)^2\cdot 49+1+\frac{2}{9}}\cdot\frac{9}{20}+\frac{1}{5}=$$

$$\frac{\left(\frac{10-8}{5}\right)\cdot\left(\frac{34-9}{90}\right)+\frac{11}{13}\cdot\frac{13}{33}}{\left(\frac{49-37}{63}\right)^2\cdot 49+1+\frac{2}{9}}\cdot\frac{9}{20}+\frac{1}{5}= \tag{129}$$

$$\frac{\frac{2}{5}\cdot\frac{25}{90}+\frac{1}{3}}{\left(\frac{12}{63}\right)^2\cdot 49+1+\frac{2}{9}}\cdot\frac{9}{20}+\frac{1}{5}=$$

$$\frac{\frac{1}{9}+\frac{1}{3}}{\left(\frac{4}{21}\right)^2\cdot 49+1+\frac{2}{9}}\cdot\frac{9}{20}+\frac{1}{5}=$$

$$\frac{\frac{1+3}{9}}{\frac{16}{441}\cdot 49+1+\frac{2}{9}}\cdot\frac{9}{20}+\frac{1}{5}\,\frac{\frac{4}{9}}{\frac{16}{9}+1+\frac{2}{9}}\cdot\frac{9}{20}+\frac{1}{5}=$$

$$\frac{\frac{4}{9}}{\frac{18}{9}+1}\cdot\frac{9}{20}+\frac{1}{5}=\frac{\frac{4}{9}}{2+1}\cdot\frac{9}{20}+\frac{1}{5}=\frac{\frac{4}{9}}{3}\cdot\frac{9}{20}+\frac{1}{5}=$$

$$\frac{4}{9}\cdot\frac{1}{3}\cdot\frac{9}{20}+\frac{1}{5}=\frac{4}{60}+\frac{1}{5}=\frac{1}{15}+\frac{1}{5}=\frac{1+3}{15}=$$

$$=\frac{4}{15}.$$

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

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

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

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

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

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

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

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

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

$$
\begin{aligned}
\left\{\frac{6}{20}+\left(-\frac{6}{5}\right)\cdot\left[-\left(\frac{3}{5}+\frac{4}{8}-\frac{3}{30}\right)+\frac{5}{6}\right]\right\}:\left[-\frac{1}{4}+\left(-6+4+\frac{5}{3}\right)\cdot\frac{18}{8}\right]+0^3 &= \\
\left\{\frac{3}{10}+\left(-\frac{6}{5}\right)\cdot\left[-\left(\frac{3}{5}+\frac{1}{2}-\frac{1}{10}\right)+\frac{5}{6}\right]\right\}:\left[-\frac{1}{4}+\left(-2+\frac{5}{3}\right)\cdot\frac{9}{4}\right] &= \\
\left\{\frac{3}{10}+\left(-\frac{6}{5}\right)\cdot\left[-\left(\frac{6+5-1}{10}\right)+\frac{5}{6}\right]\right\}:\left[-\frac{1}{4}+\left(\frac{-6+5}{3}\right)\cdot\frac{9}{4}\right] &= \\
\left\{\frac{3}{10}+\left(-\frac{6}{5}\right)\cdot\left[-\left(\frac{10}{10}\right)+\frac{5}{6}\right]\right\}:\left[-\frac{1}{4}+\left(-\frac{1}{3}\right)\cdot\frac{9}{4}\right] &= \\
\left\{\frac{3}{10}+\left(-\frac{6}{5}\right)\cdot\left[-1+\frac{5}{6}\right]\right\}:\left[-\frac{1}{4}-\frac{3}{4}\right] &= \\
\left\{\frac{3}{10}+\left(-\frac{6}{5}\right)\cdot\left[\frac{-6+5}{6}\right]\right\}:\left[-\frac{4}{4}\right] &= \\
\left\{\frac{3}{10}+\left(-\frac{6}{5}\right)\cdot\left[-\frac{1}{6}\right]\right\}:-1 &= \\
\left\{\frac{3}{10}+\frac{1}{5}\right\}\cdot(-1) &= \\
\left\{\frac{3+2}{10}\right\}\cdot(-1) &= \\
\frac{5}{10}\cdot(-1) &= \\
=\frac{1}{2}\cdot(-1) &= \\
=-\frac{1}{2}. &
\end{aligned}
\tag{139}
$$

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

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

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

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

$$\frac{\frac{1}{3}-2^{1}\cdot\left(4^{0}-\frac{1}{4}\right)}{\frac{2}{12}-\left(2-\frac{1}{2}\right)\cdot(-3)}-\frac{2-\left[\frac{4}{20}-\left(\frac{1}{3}-\frac{2}{10}\right):\left(3^{0}-\frac{1}{5}\right)\right]}{\frac{1}{11}\cdot\left(1-\frac{1}{12}\right)\cdot\left(2\cdot5^{1}+\frac{9}{5}\right)}=$$

$$\frac{\frac{1}{3}-2\cdot\left(1-\frac{1}{4}\right)}{\frac{1}{6}-\left(2-\frac{1}{2}\right)\cdot(-3)}-\frac{2-\left[\frac{1}{5}-\left(\frac{1}{3}-\frac{1}{5}\right):\left(1-\frac{1}{5}\right)\right]}{\frac{1}{11}\cdot\left(1-\frac{1}{12}\right)\cdot\left(10+\frac{9}{5}\right)}=$$

$$\frac{\frac{1}{3}-2\cdot\left(\frac{4-1}{4}\right)}{\frac{1}{6}-\left(\frac{4-1}{2}\right)\cdot(-3)}-\frac{2-\left[\frac{1}{5}-\left(\frac{5-3}{15}\right):\left(\frac{5-1}{5}\right)\right]}{\frac{1}{11}\cdot\left(\frac{12-1}{12}\right)\cdot\left(\frac{50+9}{5}\right)}=$$

$$\frac{\frac{1}{3}-2\cdot\frac{3}{4}}{\frac{1}{6}-\frac{3}{2}\cdot(-3)}-\frac{2-\left[\frac{1}{5}-\frac{2}{15}:\frac{4}{5}\right]}{\frac{1}{11}\cdot\frac{11}{12}\cdot\frac{59}{5}}=$$

$$\frac{\frac{1}{3}-\frac{6}{4}}{\frac{1}{6}+\frac{9}{2}}-\frac{2-\left[\frac{1}{5}-\frac{2}{15}\cdot\frac{5}{4}\right]}{\frac{59}{60}}=$$

$$\frac{\frac{4-18}{12}}{\frac{1+27}{6}}-\frac{2-\left[\frac{1}{5}-\frac{1}{6}\right]}{\frac{59}{60}}=$$

$$\frac{-\frac{7}{6}}{\frac{14}{3}}-\frac{2-\left[\frac{6-5}{30}\right]}{\frac{59}{60}}=$$

$$-\frac{7}{6}\cdot\frac{3}{14}-\frac{2-\frac{1}{30}}{\frac{59}{60}}=$$

$$-\frac{1}{4}-\frac{\frac{60-1}{30}}{\frac{59}{60}}=$$

$$-\frac{1}{4}-\frac{59}{30}\cdot\frac{60}{59}=$$

$$-\frac{1}{4}-2=$$

$$\frac{-1-8}{4}=$$

$$=-\frac{9}{4}.$$

(144)

$$
\begin{aligned}
&\frac{\frac{14}{35}+2\cdot\left(1-\frac{3}{4}\right)}{\frac{6}{4}+\left(2-\frac{1}{5}\right)\cdot\left(\frac{2}{3}\right)}+\frac{3-\left[\frac{2}{8}-\left(\frac{1}{3}-\frac{1}{4}\right):\left(-\frac{3}{2}+\frac{10}{15}\right)\right]}{\frac{1}{2}\cdot\left(\frac{3}{8}-4^0\right)\cdot\left(3^2+\frac{8}{5}\right)}=\\
&\frac{\frac{2}{5}+2\cdot\left(1-\frac{3}{4}\right)}{\frac{3}{2}+\left(2-\frac{1}{5}\right)\cdot\left(\frac{2}{3}\right)}+\frac{3-\left[\frac{1}{4}-\left(\frac{1}{3}-\frac{1}{4}\right):\left(\frac{2}{3}-\frac{3}{2}\right)\right]}{\frac{1}{2}\cdot\left(\frac{3}{8}-1\right)\cdot\left(9+\frac{8}{5}\right)}=\\
&\frac{\frac{2}{5}+2\cdot\left(\frac{4-3}{4}\right)}{\frac{3}{2}+\left(\frac{10-1}{5}\right)\cdot\left(\frac{2}{3}\right)}+\frac{3-\left[\frac{1}{4}-\left(\frac{4-3}{12}\right):\left(\frac{4-9}{6}\right)\right]}{\frac{1}{2}\cdot\left(\frac{3-8}{8}\right)\cdot\left(\frac{45+8}{5}\right)}=\\
&\frac{\frac{2}{5}+2\cdot\left(\frac{1}{4}\right)}{\frac{3}{2}+\left(\frac{9}{5}\right)\cdot\left(\frac{2}{3}\right)}+\frac{3-\left[\frac{1}{4}-\left(\frac{1}{12}\right):\left(-\frac{5}{6}\right)\right]}{\frac{1}{2}\cdot\left(-\frac{5}{8}\right)\cdot\left(\frac{53}{5}\right)}=\\
&\frac{\frac{2}{5}+\frac{1}{2}}{\frac{3}{2}+\frac{6}{5}}+\frac{3-\left[\frac{1}{4}-\frac{1}{12}\cdot\left(-\frac{6}{5}\right)\right]}{\frac{1}{2}\cdot\left(-\frac{53}{8}\right)}=\\
&\frac{\frac{4+5}{10}}{\frac{15+12}{10}}+\frac{3-\left[\frac{1}{4}+\frac{1}{10}\right]}{-\frac{53}{16}}=\\
&\frac{9}{10}\cdot\frac{10}{27}+\frac{3-\left[\frac{5+2}{20}\right]}{-\frac{53}{16}}=\\
&\frac{1}{3}+\frac{3-\frac{7}{20}}{-\frac{53}{16}}=\\
&\frac{1}{3}+\frac{\frac{60-7}{20}}{-\frac{53}{16}}=\\
&\frac{1}{3}+\frac{53}{20}\cdot-\frac{16}{53}=\\
&\frac{1}{3}-\frac{4}{5}=\\
&=\frac{5-12}{15}=\\
&=-\frac{7}{15}.
\end{aligned}
\tag{145}
$$

$$\frac{\left\{\left[\left(\frac{2}{3}\right)^{3}+\left(\frac{5}{10}\right)^{5-3}\cdot\frac{2}{3}+\frac{32}{135}\right]\cdot\frac{25}{3}-2^{2}\right\}\cdot\frac{77}{3}}{\left[\left(\frac{4}{6}\right)^{2}+2^{1}\cdot\frac{2}{3}\cdot\frac{1}{4}+\left(\frac{1}{4}\right)^{2}\right]\cdot 3}-10-3^{1}=$$

$$\frac{\left\{\left[\left(\frac{2}{3}\right)^{3}+\left(\frac{1}{2}\right)^{2}\cdot\frac{2}{3}+\frac{32}{135}\right]\cdot\frac{25}{3}-4\right\}\cdot\frac{77}{3}}{\left[\left(\frac{2}{3}\right)^{2}+2\cdot\frac{2}{3}\cdot\frac{1}{4}+\left(\frac{1}{4}\right)^{2}\right]\cdot 3}-13=$$

$$\frac{\left\{\left[\frac{8}{27}+\frac{1}{4}\cdot\frac{2}{3}+\frac{32}{135}\right]\cdot\frac{25}{3}-4\right\}\cdot\frac{77}{3}}{\left[\frac{4}{9}+\frac{1}{3}+\frac{1}{16}\right]\cdot 3}-13=$$

$$\frac{\left\{\left[\frac{8}{27}+\frac{1}{6}+\frac{32}{135}\right]\cdot\frac{25}{3}-4\right\}\cdot\frac{77}{3}}{\left[\frac{64+48+9}{144}\right]\cdot 3}-13=$$

$$\frac{\left\{\left[\frac{80+45+64}{270}\right]\cdot\frac{25}{3}-4\right\}\cdot\frac{77}{3}}{\left[\frac{121}{144}\right]\cdot 3}-13\frac{\left\{\frac{189}{270}\cdot\frac{25}{3}-4\right\}\cdot\frac{77}{3}}{\frac{121}{144}\cdot 3}-13= \tag{146}$$

$$\frac{\left\{\frac{7}{10}\cdot\frac{25}{3}-4\right\}\cdot\frac{77}{3}}{\frac{121}{48}}-13\frac{\left\{\frac{35}{6}-4\right\}\cdot\frac{77}{3}}{\frac{121}{48}}-13=$$

$$\frac{\left\{\frac{35-24}{6}\right\}\cdot\frac{77}{3}}{\frac{121}{48}}-13=$$

$$\frac{\frac{11}{6}\cdot\frac{77}{3}}{\frac{121}{48}}-13\frac{\frac{847}{18}}{\frac{121}{48}}-13=$$

$$\frac{847}{18}\cdot\frac{48}{121}-13=\frac{56}{3}-13=$$

$$\frac{56-39}{3}=$$

$$=\frac{17}{3}.$$

$$
\begin{aligned}
&\left[\left(2^1-\frac{3}{5}:2{,}25\right):\left(0{,}0\overline{7}+\frac{3}{45}\right)\right]\cdot\frac{5}{108}+0{,}0\overline{3}:\left[\left(1{,}\overline{6}-\frac{1}{7}\right):\left(7^0+\frac{25}{7}\right)\right]=\\
&\left[\left(2-\frac{3}{5}:2{,}25\right):\left(0{,}0\overline{7}+\frac{1}{15}\right)\right]\cdot\frac{5}{108}+0{,}0\overline{3}:\left[\left(1{,}\overline{6}-\frac{1}{7}\right):\left(1+\frac{25}{7}\right)\right]=\\
&\left[\left(2-\frac{3}{5}:\frac{225}{100}\right):\left(\frac{7-0}{90}+\frac{1}{15}\right)\right]\cdot\frac{5}{108}+\frac{3-0}{90}:\left[\left(\frac{16-1}{9}-\frac{1}{7}\right):\left(1+\frac{25}{7}\right)\right]=\\
&\left[\left(2-\frac{3}{5}:\frac{9}{4}\right):\left(\frac{7}{90}+\frac{1}{15}\right)\right]\cdot\frac{5}{108}+\frac{1}{30}:\left[\left(\frac{15}{9}-\frac{1}{7}\right):\left(1+\frac{25}{7}\right)\right]=\\
&\left[\left(2-\frac{3}{5}\cdot\frac{4}{9}\right):\left(\frac{7+6}{90}\right)\right]\cdot\frac{5}{108}+\frac{1}{30}:\left[\left(\frac{105-9}{63}\right):\left(\frac{7+25}{7}\right)\right]=\\
&\left[\left(2-\frac{4}{15}\right):\frac{16}{15}\right]\cdot\frac{5}{108}+\frac{1}{30}:\left[\frac{32}{21}:\frac{32}{7}\right]=\\
&\left[\left(\frac{30-4}{15}\right)\cdot\frac{15}{16}\right]\cdot\frac{5}{108}+\frac{1}{30}:\left[\frac{32}{21}\cdot\frac{7}{32}\right]=\\
&\left[\frac{26}{15}\cdot\frac{15}{16}\right]\cdot\frac{5}{108}+\frac{1}{30}:\frac{1}{3}=\\
&12\cdot\frac{5}{108}+\frac{1}{30}\cdot 3=\\
&\frac{5}{9}+\frac{1}{10}=\\
&\frac{50+9}{90}=\\
&=\frac{59}{90}.
\end{aligned}
\tag{147}
$$

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

$$\frac{\left(\frac{6}{8}-0,0\overline{3}\right)\cdot\frac{3}{43}+\left(2,\overline{4}-1,2\right)\cdot\frac{27}{21}-\frac{8}{5}}{\left[\frac{2,3-2,\overline{15}}{0,20+1,\overline{3}}\cdot\left(5+\frac{8}{49}\right)+\frac{3}{4}\right]:\left(6^0+\frac{1}{4}\right)}+\frac{4}{0,\overline{2}+1,2}=$$

$$\frac{\left(\frac{3}{4}-0,0\overline{3}\right)\cdot\frac{3}{43}+\left(2,\overline{4}-1,2\right)\cdot\frac{9}{7}-\frac{8}{5}}{\left[\frac{2,3-2,\overline{15}}{0,2+1,\overline{3}}\cdot\left(5+\frac{8}{49}\right)+\frac{3}{4}\right]:\left(1+\frac{1}{4}\right)}+\frac{4}{0,\overline{2}+1,2}=$$

$$\frac{\left(\frac{3}{4}-\frac{3-0}{90}\right)\cdot\frac{3}{43}+\left(\frac{24-2}{9}-\frac{12}{10}\right)\cdot\frac{9}{7}-\frac{8}{5}}{\left[\frac{\frac{23}{10}-\frac{215-2}{99}}{\frac{2}{10}+\frac{13-1}{9}}\cdot\left(\frac{245+8}{49}\right)+\frac{3}{4}\right]:\left(1+\frac{1}{4}\right)}+\frac{4}{\frac{2-0}{9}+\frac{12}{10}}=$$

$$\frac{\left(\frac{3}{4}-\frac{1}{30}\right)\cdot\frac{3}{43}+\left(\frac{22}{9}-\frac{6}{5}\right)\cdot\frac{9}{7}-\frac{8}{5}}{\left[\frac{\frac{23}{10}-\frac{213}{99}}{\frac{1}{5}+\frac{4}{3}}\cdot\frac{253}{49}+\frac{3}{4}\right]:\left(\frac{4+1}{4}\right)}+\frac{4}{\frac{2}{9}+\frac{6}{5}}=$$

$$\frac{\left(\frac{45-2}{60}\right)\cdot\frac{3}{43}+\left(\frac{110-54}{45}\right)\cdot\frac{9}{7}-\frac{8}{5}}{\left[\frac{2277-2130}{\frac{990}{3+20}}\cdot\frac{253}{49}+\frac{3}{4}\right]:\frac{5}{4}}+\frac{4}{\frac{10+54}{45}}= \tag{149}$$

$$\frac{\left(\frac{43}{60}\right)\cdot\frac{3}{43}+\left(\frac{56}{45}\right)\cdot\frac{9}{7}-\frac{8}{5}}{\left[\frac{147}{\frac{990}{23}\cdot\frac{253}{49}+\frac{3}{4}}\right]\cdot\frac{4}{5}}+\frac{4}{64}{45}\frac{\frac{1}{20}+\frac{8}{5}-\frac{8}{5}}{\left[\frac{147}{990}\cdot\frac{15}{23}\cdot\frac{253}{49}+\frac{3}{4}\right]\cdot\frac{4}{5}}+4\cdot\frac{45}{64}=$$

$$\frac{\frac{1}{20}}{\left[\frac{1}{2}+\frac{3}{4}\right]\cdot\frac{4}{5}}+\frac{45}{16}\frac{\frac{1}{20}}{\left[\frac{2+3}{4}\right]\cdot\frac{4}{5}}+\frac{45}{16}\frac{\frac{1}{20}}{\frac{5}{4}\cdot\frac{4}{5}}+\frac{45}{16}=$$

$$\frac{1}{20}+\frac{45}{16}=$$

$$\frac{4+225}{80}=$$

$$=\frac{229}{80}.$$

$$
\begin{aligned}
\left\{\left[\frac{10}{34}+0,\overline{27}\cdot\left(0,\overline{5}-\frac{25}{100}\right):\left(3^0+0,1\overline{3}\right)\right]:\left(0,3+\frac{1}{17}\right)\right\}\cdot\left(61\cdot 0,0\overline{36}\right)+\frac{5}{10}&=\\
\left\{\left[\frac{5}{17}+0,\overline{27}\cdot\left(0,\overline{5}-\frac{25}{100}\right):\left(1+0,1\overline{3}\right)\right]:\left(0,3+\frac{1}{17}\right)\right\}\cdot\left(61\cdot 0,0\overline{36}\right)+\frac{1}{2}&=\\
\left\{\left[\frac{5}{17}+\frac{27-0}{99}\cdot\left(\frac{5-0}{9}-\frac{25}{100}\right):\left(1+\frac{13-1}{90}\right)\right]:\left(\frac{3}{10}+\frac{1}{17}\right)\right\}\cdot\left(61\cdot\frac{36-0}{990}\right)+\frac{1}{2}&=\\
\left\{\left[\frac{5}{17}+\frac{3}{11}\cdot\left(\frac{5}{9}-\frac{1}{4}\right):\left(1+\frac{2}{15}\right)\right]:\left(\frac{51+10}{170}\right)\right\}\cdot\left(61\cdot\frac{2}{55}\right)+\frac{1}{2}&=\\
\left\{\left[\frac{5}{17}+\frac{3}{11}\cdot\left(\frac{20-9}{36}\right):\left(\frac{15+2}{15}\right)\right]:\frac{61}{170}\right\}\cdot\frac{122}{55}+\frac{1}{2}&=\\
\left\{\left[\frac{5}{17}+\frac{3}{11}\cdot\frac{11}{36}:\frac{17}{15}\right]:\frac{61}{170}\right\}\cdot\frac{122}{55}+\frac{1}{2}&=\\
\left\{\left[\frac{5}{17}+\frac{3}{11}\cdot\frac{11}{36}\cdot\frac{15}{17}\right]\cdot\frac{170}{61}\right\}\cdot\frac{122}{55}+\frac{1}{2}&=\\
\left\{\left[\frac{5}{17}+\frac{5}{68}\right]\cdot\frac{170}{61}\right\}\cdot\frac{122}{55}+\frac{1}{2}&=\\
\left\{\left[\frac{20+5}{68}\right]\cdot\frac{170}{61}\right\}\cdot\frac{122}{55}+\frac{1}{2}&=\\
\frac{25}{68}\cdot\frac{170}{61}\cdot\frac{122}{55}+\frac{1}{2}&=\\
\frac{25}{11}+\frac{1}{2}&=\\
=\frac{50+11}{22}&=\\
=\frac{61}{22}.&
\end{aligned}
\tag{150}
$$

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

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

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

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

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

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

$$
\begin{aligned}
&\left\{\left[\left(\frac{2}{3}\right)^{1}\right]^{6}\right\}^{4} : \left[\left(-\frac{2}{3}\right)^{4}\right]^{3} : \left[\left(\frac{2}{3}\right)^{3}\right]^{2} \cdot \left[\left(-\frac{9}{12}\right)^{2} \cdot \left(\frac{3}{4}\right)^{3} \cdot \left(\frac{3}{4}\right)^{3}\right] : \left(\frac{1}{2}\right)^{4} = \\
&\left\{\left[\left(\frac{2}{3}\right)^{1}\right]^{6}\right\}^{4} : \left[\left(-\frac{2}{3}\right)^{4}\right]^{3} : \left[\left(\frac{2}{3}\right)^{3}\right]^{2} \cdot \left[\left(-\frac{3}{4}\right)^{2} \cdot \left(\frac{3}{4}\right)^{3} \cdot \left(\frac{3}{4}\right)^{3}\right] : \left(\frac{1}{2}\right)^{4} = \\
&\left(\frac{2}{3}\right)^{24} : \left(\frac{2}{3}\right)^{12} : \left(\frac{2}{3}\right)^{6} \cdot \left(\frac{3}{4}\right)^{8} : \left(\frac{1}{2}\right)^{4} = \\
&\left(\frac{2}{3}\right)^{12} : \left(\frac{2}{3}\right)^{6} \cdot \left(\frac{3}{4}\right)^{8} : \left(\frac{1}{2}\right)^{4} = \\
&\left(\frac{2}{3}\right)^{6} \cdot \left(\frac{3}{4}\right)^{8} \cdot 4^{2} = \\
&2^{6} \cdot \frac{3^{2}}{4^{6}} = \\
&= 2^{6} \cdot \frac{3^{2}}{2^{12}} = \\
&= \frac{3^{2}}{2^{6}} = \\
&= \frac{9}{64}.
\end{aligned}
\tag{157}
$$

$$
\begin{aligned}
&\frac{\left[\left(1\cdot 2+\frac{4}{8}\right)^2\cdot\left(3-\frac{28}{21}\right)^2\cdot\left(-3^0-\frac{1}{5}\right)^2\right]^{-1}:\left(-6+5+\frac{4}{5}\right)^2}{\frac{4}{8}\cdot\left(-\frac{1}{3}\right)^{-2}+\left(\frac{2}{8}\right)^2\cdot\left(8^0-\frac{3}{8}\right)^{-2}:\left(1-\frac{3}{5}\right)^2-\frac{20}{8}}= \\
&\frac{\left[\left(2+\frac{1}{2}\right)^2\cdot\left(3-\frac{4}{3}\right)^2\cdot\left(-1-\frac{1}{5}\right)^2\right]^{-1}:\left(-1+\frac{4}{5}\right)^2}{\frac{1}{2}\cdot\left(-\frac{1}{3}\right)^{-2}+\left(\frac{1}{4}\right)^2\cdot\left(1-\frac{3}{8}\right)^{-2}:\left(1-\frac{3}{5}\right)^2-\frac{5}{2}}= \\
&\frac{\left[\left(\frac{4+1}{2}\right)^2\cdot\left(\frac{9-4}{3}\right)^2\cdot\left(\frac{-5-1}{5}\right)^2\right]^{-1}:\left(\frac{-5+4}{5}\right)^2}{\frac{1}{2}\cdot 9+\frac{1}{16}\cdot\left(\frac{8-3}{8}\right)^{-2}:\left(\frac{5-3}{5}\right)^2-\frac{5}{2}}= \\
&\frac{\left[\left(\frac{5}{2}\right)^2\cdot\left(\frac{5}{3}\right)^2\cdot\left(-\frac{6}{5}\right)^2\right]^{-1}:\left(-\frac{1}{5}\right)^2}{\frac{9}{2}+\frac{1}{16}\cdot\left(\frac{5}{8}\right)^{-2}:\left(\frac{2}{5}\right)^2-\frac{5}{2}}= \\
&\frac{\left[\left(\frac{25}{6}\right)^2\cdot\left(\frac{6}{5}\right)^2\right]^{-1}:\frac{1}{25}}{\frac{9}{2}+\frac{1}{16}\cdot\left(\frac{8}{5}\right)^2:\left(\frac{2}{5}\right)^2-\frac{5}{2}}= \\
&\frac{\left(5^2\right)^{-1}:\frac{1}{25}}{\frac{9}{2}+\left(\frac{2}{5}\right)^2:\left(\frac{2}{5}\right)^2-\frac{5}{2}}= \\
&\frac{5^{-2}:\frac{1}{25}}{\frac{4}{2}+\left(\frac{2}{5}\right)^0}= \\
&\frac{\frac{1}{25}:\frac{1}{25}}{\frac{4}{2}+\left(\frac{2}{5}\right)^0}= \\
&\frac{1}{2+1}= \\
&=\frac{1}{3}.
\end{aligned}
\tag{158}
$$

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

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

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

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

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

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

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

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

$$
\begin{aligned}
&\frac{2}{3}-\frac{8}{48}+\left[\frac{3}{6}-\frac{1}{3}-\left(7^0+\frac{4}{5}\right)\cdot 5^1\right]-\left[\frac{4}{28}+\frac{2}{3}-\left(\frac{1}{14}+1\right)\right]\cdot\frac{7}{11}-\left(-2^3\right)= \\
&\frac{2}{3}-\frac{1}{6}+\left[\frac{1}{2}-\frac{1}{3}-\left(1+\frac{4}{5}\right)\cdot 5\right]-\left[\frac{1}{7}+\frac{2}{3}-\left(\frac{1}{14}+1\right)\right]\cdot\frac{7}{11}-\left(-2^3\right)= \\
&\frac{2}{3}-\frac{1}{6}+\left[\frac{1}{2}-\frac{1}{3}-\left(\frac{5+4}{5}\right)\cdot 5\right]-\left[\frac{1}{7}+\frac{2}{3}-\left(\frac{1+14}{14}\right)\right]\cdot\frac{7}{11}+8= \\
&\frac{2}{3}-\frac{1}{6}+\left[\frac{1}{2}-\frac{1}{3}-\frac{9}{5}\cdot 5\right]-\left[\frac{1}{7}+\frac{2}{3}-\frac{15}{14}\right]\cdot\frac{7}{11}+8= \\
&\frac{2}{3}-\frac{1}{6}+\left[\frac{1}{2}-\frac{1}{3}-9\right]-\left[\frac{6+28-45}{42}\right]\cdot\frac{7}{11}+8= \\
&\frac{2}{3}-\frac{1}{6}+\left[\frac{3-2-54}{6}\right]-\left[-\frac{11}{42}\right]\cdot\frac{7}{11}+8= \\
&\frac{2}{3}-\frac{1}{6}-\frac{53}{6}+\frac{11}{42}\cdot\frac{7}{11}+8= \\
&\frac{2}{3}-\frac{1}{6}-\frac{53}{6}+\frac{1}{6}+8= \\
&\frac{2}{3}-\frac{53}{6}+8= \\
&=\frac{4-53+48}{6}= \\
&=-\frac{1}{6}.
\end{aligned}
\tag{167}
$$

$$
\begin{aligned}
&\left\{\left[\left(3^1-\frac{26}{22}\right):\left(\frac{9}{6}-\frac{4}{11}\right)\right]-\frac{9}{15}\right\}\cdot\frac{8}{3}-\left[\frac{4}{3}:\frac{4}{12}-2^2+\frac{(-2)^4}{5}\right]=\\
&\left\{\left[\left(3-\frac{13}{11}\right):\left(\frac{3}{2}-\frac{4}{11}\right)\right]-\frac{3}{5}\right\}\cdot\frac{8}{3}-\left[\frac{4}{3}:\frac{1}{3}-4+\frac{(-2)^4}{5}\right]=\\
&\left\{\left[\left(\frac{33-13}{11}\right):\left(\frac{33-8}{22}\right)\right]-\frac{3}{5}\right\}\cdot\frac{8}{3}-\left[\frac{4}{3}\cdot 3-4+\frac{16}{5}\right]=\\
&\left\{\left[\frac{20}{11}:\frac{25}{22}\right]-\frac{3}{5}\right\}\cdot\frac{8}{3}-\frac{16}{5}=\\
&\left\{\left[\frac{20}{11}\cdot\frac{22}{25}\right]-\frac{3}{5}\right\}\cdot\frac{8}{3}-\frac{16}{5}=\\
&\left\{\frac{8}{5}-\frac{3}{5}\right\}\cdot\frac{8}{3}-\frac{16}{5}=\\
&\frac{5}{5}\cdot\frac{8}{3}-\frac{16}{5}=\\
&\frac{8}{3}-\frac{16}{5}=\\
&=\frac{40-48}{15}=\\
&=-\frac{8}{15}.
\end{aligned}
\tag{168}
$$

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

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

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

$$
\begin{aligned}
&\frac{\left(-\frac{4}{8}\right)^4 : \left(+\frac{7}{14}\right)^2 + \left[\left(\frac{23}{30}-\frac{26}{36}\right)\cdot\left(\frac{23}{15}-\frac{1}{30}\right)\right]\cdot\frac{6}{9}-\frac{5}{4}}{\left[\frac{13}{12}-\left(\frac{7}{9}-\frac{1}{3}\right)+\frac{2}{9}\right]-\left(-\frac{7}{18}+\frac{1}{12}+\frac{5}{6}\right)-\frac{1}{3}+1} = \\
&\frac{\left(-\frac{1}{2}\right)^4 : \left(+\frac{1}{2}\right)^2 + \left[\left(\frac{23}{30}-\frac{13}{18}\right)\cdot\left(\frac{23}{15}-\frac{1}{30}\right)\right]\cdot\frac{2}{3}-\frac{5}{4}}{\left[\frac{13}{12}-\left(\frac{7}{9}-\frac{1}{3}\right)+\frac{2}{9}\right]-\left(-\frac{7}{18}+\frac{1}{12}+\frac{5}{6}\right)-\frac{1}{3}+1} = \\
&\frac{\left(\frac{1}{2}\right)^2 + \left[\left(\frac{69-65}{90}\right)\cdot\left(\frac{46-1}{30}\right)\right]\cdot\frac{2}{3}-\frac{5}{4}}{\left[\frac{13}{12}-\left(\frac{7-3}{9}\right)+\frac{2}{9}\right]-\left(\frac{-14+3+30}{36}\right)-\frac{1}{3}+1} = \\
&\frac{\frac{1}{4}+\left[\frac{2}{45}\cdot\frac{3}{2}\right]\cdot\frac{2}{3}-\frac{5}{4}}{\left[\frac{13}{12}-\frac{4}{9}+\frac{2}{9}\right]-\frac{19}{36}-\frac{1}{3}+1} = \\
&\frac{\frac{1}{4}+\frac{1}{15}\cdot\frac{2}{3}-\frac{5}{4}}{\left[\frac{13}{12}-\frac{2}{9}\right]-\frac{19}{36}-\frac{1}{3}+1} = \\
&\frac{\frac{1}{4}+\frac{2}{45}-\frac{5}{4}}{\left[\frac{39-8}{36}\right]-\frac{19}{36}-\frac{1}{3}+1} = \\
&\frac{\frac{2}{45}-1}{\frac{31}{36}-\frac{19}{36}-\frac{1}{3}+1} = \\
&\frac{\frac{2-45}{45}}{\frac{1}{3}-\frac{1}{3}+1} = \\
&\frac{-\frac{43}{45}}{1} = \\
&= -\frac{43}{45}.
\end{aligned}
\tag{172}
$$

$$
\begin{aligned}
&\frac{\left(\frac{8}{3}-2^{1}-\frac{2}{5}\right)\cdot\left(\frac{14}{4}-\frac{7}{3}+\frac{13}{12}\right)\cdot\frac{30}{4}-\left[\left(\frac{2}{3}-\frac{3}{5}\right)\cdot\left(4^{0}+\frac{7}{2}-\frac{6}{8}\right)\right]\cdot\frac{15}{4}}{\left[\left(7^{0}+\frac{1}{2}-\frac{12}{20}\right)-\left(-\frac{4}{5}+\frac{3}{4}+\frac{5}{10}\right)\right]\cdot\left(\frac{4}{3}-\frac{45}{81}\right)}=\\
&\frac{\left(\frac{8}{3}-2-\frac{2}{5}\right)\cdot\left(\frac{7}{2}-\frac{7}{3}+\frac{13}{12}\right)\cdot\frac{15}{2}-\left[\left(\frac{2}{3}-\frac{3}{5}\right)\cdot\left(1+\frac{7}{2}-\frac{3}{4}\right)\right]\cdot\frac{15}{4}}{\left[\left(1+\frac{1}{2}-\frac{3}{5}\right)-\left(-\frac{4}{5}+\frac{3}{4}+\frac{1}{2}\right)\right]\cdot\left(\frac{4}{3}-\frac{5}{9}\right)}=\\
&\frac{\left(\frac{40-30-6}{15}\right)\cdot\left(\frac{42-28+13}{12}\right)\cdot\frac{15}{2}-\left[\left(\frac{10-9}{15}\right)\cdot\left(\frac{4+14-3}{4}\right)\right]\cdot\frac{15}{4}}{\left[\left(\frac{10+5-6}{10}\right)-\left(\frac{-16+15+10}{20}\right)\right]\cdot\left(\frac{12-5}{9}\right)}=\\
&\frac{\frac{4}{15}\cdot\frac{27}{12}\cdot\frac{15}{2}-\left[\frac{1}{15}\cdot\frac{15}{4}\right]\cdot\frac{15}{4}}{\left[\frac{9}{10}-\frac{9}{20}\right]\cdot\frac{7}{9}}=\\
&\frac{\frac{9}{2}-\frac{1}{4}\cdot\frac{15}{4}}{\left[\frac{18-9}{20}\right]\cdot\frac{7}{9}}=\\
&\frac{\frac{9}{2}-\frac{15}{16}}{\frac{9}{20}\cdot\frac{7}{9}}=\\
&\frac{72-15}{16}\cdot\frac{20}{7}=\\
&\frac{57}{4}\cdot\frac{5}{7}=\\
&=\frac{285}{28}.
\end{aligned}
\tag{173}
$$

$$
\begin{aligned}
4+\frac{\left(\frac{18}{24}+\frac{1}{3}:\frac{200}{500}\right):\left(\frac{3}{5}+\frac{5}{3}-7^0\right)}{\left(2+\frac{1}{3}\right)\cdot\left(\frac{12}{16}-\frac{4}{7}\right)}+\frac{\frac{5}{9}+\frac{7}{21}}{\frac{4}{3}:\frac{5}{2}}-9+1+\frac{4}{6}&=\\
4+\frac{\left(\frac{3}{4}+\frac{1}{3}:\frac{2}{5}\right):\left(\frac{3}{5}+\frac{5}{3}-1\right)}{\left(2+\frac{1}{3}\right)\cdot\left(\frac{3}{4}-\frac{4}{7}\right)}+\frac{\frac{5}{9}+\frac{1}{3}}{\frac{4}{3}:\frac{5}{2}}-8+\frac{2}{3}&=\\
4+\frac{\left(\frac{3}{4}+\frac{1}{3}\cdot\frac{5}{2}\right):\left(\frac{9+25-15}{15}\right)}{\left(\frac{6+1}{3}\right)\cdot\left(\frac{21-16}{28}\right)}+\frac{\frac{5+3}{9}}{\frac{4}{3}\cdot\frac{2}{5}}-8+\frac{2}{3}&=\\
4+\frac{\left(\frac{3}{4}+\frac{5}{6}\right):\frac{19}{15}}{\frac{7}{3}\cdot\frac{5}{28}}+\frac{\frac{8}{9}}{\frac{8}{15}}-8+\frac{2}{3}&=\\
4+\frac{\left(\frac{9+10}{12}\right)\cdot\frac{15}{19}}{\frac{5}{12}}+\frac{\frac{8}{9}}{\frac{8}{15}}-8+\frac{2}{3}&=\\
4+\frac{\frac{19}{12}\cdot\frac{15}{19}}{\frac{5}{12}}+\frac{8}{9}\cdot\frac{15}{8}-8+\frac{2}{3}&=\\
4+\frac{5}{4}\cdot\frac{12}{5}+\frac{5}{3}-8+\frac{2}{3}&=\\
4+3+\frac{5}{3}-8+\frac{2}{3}&=\\
\frac{7}{3}-1&=\\
=\frac{7-3}{3}&=\\
=\frac{4}{3}.&
\end{aligned}
\tag{174}
$$

$$
\begin{aligned}
&\frac{2^1-\left(-\frac{1}{64}\right)\cdot\left(2^3+\frac{1}{3}\right)^2\cdot\left(2\cdot 4-\frac{1}{2}\right)\cdot\left(-5^0-\frac{1}{5}\right)^3\cdot\left(\frac{2}{6}\right)^2\cdot\left(1-\frac{7}{35}\right)^2-\frac{1}{3}}{\left(\frac{6}{16}-\frac{1}{12}+\frac{5}{6}\right)+\left\{-\frac{50}{80}+\left[\frac{15}{4}+\left(-\frac{15}{28}-2-\frac{3}{4}+\frac{4}{14}\right)\right]\right\}}-\frac{3}{5}= \\
&\frac{2-\left(-\frac{1}{64}\right)\cdot\left(8+\frac{1}{3}\right)^2\cdot\left(8-\frac{1}{2}\right)\cdot\left(-1-\frac{1}{5}\right)^3\cdot\left(\frac{1}{3}\right)^2\cdot\left(1-\frac{1}{5}\right)^2-\frac{1}{3}}{\left(\frac{3}{8}-\frac{1}{12}+\frac{5}{6}\right)+\left\{-\frac{5}{8}+\left[\frac{15}{4}+\left(-\frac{15}{28}-2-\frac{3}{4}+\frac{2}{7}\right)\right]\right\}}-\frac{3}{5}= \\
&\frac{2-\left(-\frac{1}{64}\right)\cdot\left(\frac{24+1}{3}\right)^2\cdot\left(\frac{16-1}{2}\right)\cdot\left(\frac{-5-1}{5}\right)^3\cdot\frac{1}{9}\cdot\left(\frac{5-1}{5}\right)^2-\frac{1}{3}}{\left(\frac{9-2+20}{24}\right)+\left\{-\frac{5}{8}+\left[\frac{15}{4}+\left(\frac{-15-56-21+8}{28}\right)\right]\right\}}-\frac{3}{5}= \\
&\frac{2-\left(-\frac{1}{64}\right)\cdot\frac{625}{9}\cdot\frac{15}{2}\cdot\left(-\frac{216}{125}\right)\cdot\frac{1}{9}\cdot\left(\frac{4}{5}\right)^2-\frac{1}{3}}{\frac{27}{24}+\left\{-\frac{5}{8}+\left[\frac{15}{4}-3\right]\right\}}-\frac{3}{5}= \\
&\frac{2-1-\frac{1}{3}}{\frac{27}{24}+\left\{-\frac{5}{8}+\left[\frac{15-12}{4}\right]\right\}}-\frac{3}{5}= \\
&\frac{1-\frac{1}{3}}{\frac{27}{24}+\left\{-\frac{5}{8}+\frac{3}{4}\right\}}-\frac{3}{5}= \\
&\frac{\frac{3-1}{3}}{\frac{27}{24}+\left\{\frac{-5+6}{8}\right\}}-\frac{3}{5}= \\
&\frac{\frac{2}{3}}{\frac{27}{24}+\frac{1}{8}}-\frac{3}{5}= \\
&\frac{\frac{2}{3}}{\frac{27+3}{24}}-\frac{3}{5}= \\
&\frac{\frac{2}{3}}{\frac{5}{4}}-\frac{3}{5}\frac{2}{3}\cdot\frac{4}{5}-\frac{3}{5}= \\
&\frac{8}{15}-\frac{3}{5}=\frac{8-9}{15}= \\
&=-\frac{1}{15}.
\end{aligned}
\tag{175}
$$

$$
\begin{aligned}
&\frac{\left[\left(\frac{4}{16}-\frac{9}{25}\cdot\frac{10}{36}\right)^2:\left(6^0+\frac{4}{8}\right)^2-\left(\frac{1}{10}\right)^2\right]\cdot\left(\frac{14}{40}-3^0\right)+6:2-\frac{1}{4}+\frac{2}{3}}{\left[\left(1-\frac{4}{12}-\frac{1}{2}\right)\cdot 2+\left(\frac{2}{3}-\frac{1}{2}+\frac{4}{24}\right)\cdot 3\right]:\frac{4}{3}+\frac{14}{21}}= \\
&\frac{\left[\left(\frac{1}{4}-\frac{9}{25}\cdot\frac{5}{18}\right)^2:\left(1+\frac{1}{2}\right)^2-\left(\frac{1}{10}\right)^2\right]\cdot\left(\frac{7}{20}-1\right)+3-\frac{1}{4}+\frac{2}{3}}{\left[\left(1-\frac{1}{3}-\frac{1}{2}\right)\cdot 2+\left(\frac{2}{3}-\frac{1}{2}+\frac{1}{6}\right)\cdot 3\right]:\frac{4}{3}+\frac{2}{3}}= \\
&\frac{\left[\left(\frac{1}{4}-\frac{1}{10}\right)^2:\left(\frac{2+1}{2}\right)^2-\frac{1}{100}\right]\cdot\left(\frac{7-20}{20}\right)+3-\frac{1}{4}+\frac{2}{3}}{\left[\left(\frac{6-2-3}{6}\right)\cdot 2+\left(\frac{4-3+1}{6}\right)\cdot 3\right]\cdot\frac{3}{4}+\frac{2}{3}}= \\
&\frac{\left[\left(\frac{5-2}{20}\right)^2:\left(\frac{3}{2}\right)^2-\frac{1}{100}\right]\cdot\left(-\frac{13}{20}\right)+3-\frac{1}{4}+\frac{2}{3}}{\left[\frac{1}{6}\cdot 2+\frac{1}{3}\cdot 3\right]\cdot\frac{3}{4}+\frac{2}{3}}= \\
&\frac{\left[\left(\frac{3}{20}\right)^2:\left(\frac{3}{2}\right)^2-\frac{1}{100}\right]\cdot\left(-\frac{13}{20}\right)+3-\frac{1}{4}+\frac{2}{3}}{\left[\frac{1}{3}+1\right]\cdot\frac{3}{4}+\frac{2}{3}}= \\
&\frac{\left[\frac{1}{100}-\frac{1}{100}\right]\cdot\left(-\frac{13}{20}\right)+3-\frac{1}{4}+\frac{2}{3}}{\left[\frac{1+3}{3}\right]\cdot\frac{3}{4}+\frac{2}{3}}= \\
&\frac{0+3-\frac{1}{4}+\frac{2}{3}}{\frac{4}{3}\cdot\frac{3}{4}+\frac{2}{3}}= \\
&\frac{\frac{36-3+8}{12}}{1+\frac{2}{3}}= \\
&\frac{\frac{41}{12}}{\frac{3+2}{3}}= \\
&\frac{41}{12}\cdot\frac{3}{5}= \\
&\frac{41}{4}\cdot\frac{1}{5}= \\
&=\frac{41}{20}.
\end{aligned}
\tag{176}
$$

$$\frac{\frac{18}{4}\cdot\left(\frac{1}{6}-\frac{9}{36}\right)-\left[\frac{5}{6}\cdot\left(\frac{7}{5}-\frac{14}{40}\right)-\frac{1}{4}\cdot\left(\frac{8}{3}-2^{1}-\frac{1}{6}\right)\right]\cdot 2}{\left\{\left(2+\frac{4}{16}+\frac{5}{12}\right)^{2}:\left[\left(\frac{6}{5}-\frac{7}{21}-\frac{1}{5}\right)^{5-1}:\left(3^{0}-\frac{1}{3}\right)^{2}\right]\right\}\cdot\frac{30}{32}}=$$

$$\frac{\frac{9}{2}\cdot\left(\frac{1}{6}-\frac{3}{12}\right)-\left[\frac{5}{6}\cdot\left(\frac{7}{5}-\frac{7}{20}\right)-\frac{1}{4}\cdot\left(\frac{8}{3}-2-\frac{1}{6}\right)\right]\cdot 2}{\left\{\left(2+\frac{1}{4}+\frac{5}{12}\right)^{2}:\left[\left(\frac{6}{5}-\frac{1}{3}-\frac{1}{5}\right)^{4}:\left(1-\frac{1}{3}\right)^{2}\right]\right\}\cdot\frac{15}{16}}=$$

$$\frac{\frac{9}{2}\cdot\left(\frac{2}{12}-\frac{3}{12}\right)-\left[\frac{5}{6}\cdot\left(\frac{28}{20}-\frac{7}{20}\right)-\frac{1}{4}\cdot\left(\frac{16-12-1}{6}\right)\right]\cdot 2}{\left\{\left(\frac{24}{12}+\frac{3}{12}+\frac{5}{12}\right)^{2}:\left[\left(1-\frac{1}{3}\right)^{4}:\left(\frac{3-1}{3}\right)^{2}\right]\right\}\cdot\frac{15}{16}}=$$

$$\frac{\frac{9}{2}\cdot\left(-\frac{1}{12}\right)-\left[\frac{5}{6}\cdot\frac{21}{20}-\frac{1}{4}\cdot\frac{1}{2}\right]\cdot 2}{\left\{\left(\frac{8}{3}\right)^{2}:\left[\left(\frac{3-1}{3}\right)^{4}:\left(\frac{2}{3}\right)^{2}\right]\right\}\cdot\frac{15}{16}}=$$

$$\frac{-\frac{3}{8}-\left[\frac{7}{8}-\frac{1}{8}\right]\cdot 2}{\left\{\left(\frac{8}{3}\right)^{2}:\left[\left(\frac{2}{3}\right)^{4}:\left(\frac{2}{3}\right)^{2}\right]\right\}\cdot\frac{15}{16}}=$$

$$\frac{-\frac{3}{8}-\left[\frac{3}{4}\right]\cdot 2}{\left\{\left(\frac{8}{3}\right)^{2}:\left[\left(\frac{2}{3}\right)^{2}\right]\right\}\cdot\frac{15}{16}}=$$

$$\frac{-\frac{3}{8}-\frac{3}{2}}{16\cdot\frac{15}{16}}=$$

$$\frac{-3-12}{\frac{8}{15}}=$$

$$-\frac{15}{8}\cdot\frac{1}{15}=$$

$$=-\frac{1}{8}.$$

(177)

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

$$
\begin{aligned}
&\frac{\left[\left(\frac{23}{30}-\frac{26}{36}\right)\cdot\left(\frac{23}{15}-\frac{4}{120}\right)\right]:\frac{3}{2}-1^0}{\left[\frac{13}{12}-\left(\frac{7}{9}-\frac{3}{9}\right)+\frac{2}{9}\right]-\left(-\frac{14}{36}+\frac{1}{12}+\frac{10}{12}\right)-\frac{4}{12}+19^0}= \\
&\frac{\left[\left(\frac{23}{30}-\frac{13}{18}\right)\cdot\left(\frac{23}{15}-\frac{1}{30}\right)\right]:\frac{3}{2}-1}{\left[\frac{13}{12}-\left(\frac{7}{9}-\frac{1}{3}\right)+\frac{2}{9}\right]-\left(-\frac{7}{18}+\frac{1}{12}+\frac{5}{6}\right)-\frac{1}{3}+1}= \\
&\frac{\left[\left(\frac{69-65}{90}\right)\cdot\left(\frac{46-1}{30}\right)\right]\cdot\frac{2}{3}-1}{\left[\frac{13}{12}-\left(\frac{7-3}{9}\right)+\frac{2}{9}\right]-\left(\frac{-14+3+30}{36}\right)-\frac{1}{3}+1}= \\
&\frac{\left[\frac{4}{90}\cdot\frac{45}{30}\right]\cdot\frac{2}{3}-1}{\left[\frac{13}{12}-\frac{4}{9}+\frac{2}{9}\right]-\frac{19}{36}-\frac{1}{3}+1}= \\
&\frac{\frac{1}{15}\cdot\frac{2}{3}-1}{\left[\frac{13}{12}-\frac{2}{9}\right]-\frac{19}{36}-\frac{1}{3}+1}= \\
&\frac{\frac{2}{45}-1}{\left[\frac{39-8}{36}\right]-\frac{19}{36}-\frac{1}{3}+1}= \\
&\frac{\frac{2-45}{45}}{\frac{31}{36}-\frac{19}{36}-\frac{1}{3}+1}= \\
&\frac{-\frac{43}{45}}{\frac{12}{36}-\frac{1}{3}+1}= \\
&\frac{-\frac{43}{45}}{\frac{12-12+36}{36}}= \\
&\frac{-\frac{43}{45}}{\frac{36}{36}}= \\
&-\frac{43}{45}\cdot 1= \\
&=-\frac{43}{45}.
\end{aligned}
\tag{179}
$$

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

$$
\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}
\tag{181}
$$

Tabella 1. Revisioni documento.

Data	Versione	Autori	Modifica
18/05/2017	3-0	E. M. Latorre	Prima emissione.
25/03/2018	3-1	E. M. Latorre	Correzione puntamenti indice.
18/02/2019	3-2	E. M. Latorre	Prima emissione col nuovo formato.