

$$1) \frac{6}{12} + \left(\frac{4}{9} \right) \left(\frac{9}{6} \right)$$

$$\frac{6}{12} + \frac{36}{54} - \frac{54}{108} + \frac{72}{108}$$

$$\frac{12}{108} \quad \frac{63}{54} \quad \frac{27}{18}$$

$$\begin{array}{r|l} 12 & 54 \mid 2 \\ 6 & 27 \mid 21 \\ 3 & 27 \mid 312 \\ 1 & 9 \mid 336 \\ 1 & 3 \mid 3 \\ 1 & 1 \end{array}$$

$$\frac{7}{6}$$

$$2) \frac{6}{10} - \left(\frac{7}{9} \right) \div \frac{10}{6} = \frac{6}{10} - \frac{42}{90} = \frac{54-42}{90}$$

$$\begin{array}{r|l} 10 & 90 \mid 2 \\ 5 & 45 \mid 3 \\ 5 & 15 \mid 3 \\ 5 & 5 \mid 5 \\ 1 & 1 \end{array}$$

$$\frac{12}{90} = \frac{6}{45} = \frac{2}{15}$$

$$\begin{array}{r} 3 \overline{) 3} \\ 12 \end{array} \quad \left(\begin{array}{r} 4 \\ 9 \end{array} \right) + \frac{4}{12}$$

$$\begin{array}{r} 3 \\ 12 \end{array} \quad \begin{array}{r} 36 \\ 54 \end{array} + \frac{4}{12} \quad \begin{array}{r} 27 + 72 + 36 \\ 108 \end{array} \quad \begin{array}{r} 135 \\ 108 \end{array}$$

$\begin{array}{r} 12 \\ 6 \\ 3 \\ 1 \\ 1 \\ 1 \end{array}$	$\begin{array}{r} 54 \\ 27 \\ 27 \\ 9 \\ 3 \\ 1 \end{array}$	$\begin{array}{r} 12 \\ 6 \\ 3 \\ 1 \\ 1 \\ 1 \end{array}$	$\begin{array}{r} 2 \\ 2 \\ 3 \\ 3 \\ 3 \\ 1 \end{array}$	$\begin{array}{r} 45 \\ 36 \end{array}$	$\begin{array}{r} 15 \\ 12 \end{array}$	$\begin{array}{r} 5 \\ 4 \end{array}$
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$$\left(\frac{8}{6} + \left(7 \frac{4}{9} \right) 3 \right) \left(2 \frac{9}{6} \right) 4 = \frac{36}{5} + \frac{67}{9} \cdot \frac{3^0}{1} \cdot \frac{21}{6} \cdot \frac{4}{1}$$

$\begin{array}{r} 5 \\ 5 \\ 5 \\ 5 \\ 1 \end{array}$	$\begin{array}{r} 99 \\ 91 \\ 31 \\ 1 \end{array}$	$\begin{array}{r} 116 \\ 13 \\ 11 \\ 1 \end{array}$	$\begin{array}{r} 12 \\ 13 \\ 13 \\ 5 \end{array}$	$\begin{array}{r} 4690 \\ 150 \end{array}$	$= \frac{4804}{15}$
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R11 $320 \frac{4}{15}$

$$\begin{array}{r} 6 \\ 12 \end{array} + \begin{array}{r} 4 \\ 9 \end{array} \begin{array}{r} 9 \\ 6 \end{array} \quad \begin{array}{r} 4 \\ 3 \end{array} - \begin{array}{r} 7 \\ 6 \end{array} + \begin{array}{r} 9 \\ 1 \end{array}$$

$$\begin{array}{r} 6 \\ 12 \end{array} + \begin{array}{r} 3 \\ 54 \end{array} \quad \begin{array}{r} 4 \\ 3 \end{array} - \begin{array}{r} 7 \\ 3 \end{array} + \begin{array}{r} 9 \\ 1 \end{array} \begin{array}{r} 2 \\ 2 \end{array}$$

$$\begin{array}{r} 6 \\ 3 \\ 1 \end{array} \quad \begin{array}{r} 27 \\ 27 \\ 9 \\ 3 \\ 1 \end{array} \quad \begin{array}{r} 3 \\ 3 \\ 3 \\ 1 \end{array} \quad \begin{array}{r} 1 \\ 1 \end{array} \quad \begin{array}{r} 2 \\ 3 \\ 3 \end{array}$$

$$54 + 72 + 144 - 126 + 972$$

$$108$$

$$\begin{array}{r} 1116 \\ 108 \end{array} \quad \begin{array}{r} 558 \\ 54 \end{array} \quad \begin{array}{r} 279 \\ 27 \end{array} \quad \begin{array}{r} 93 \\ 9 \end{array} \quad \begin{array}{r} 31 \\ 3 \end{array}$$