

Zadání:

$$\text{a) } \frac{1\frac{3}{7} - 2\frac{3}{5}}{2\frac{4}{9} + 1\frac{1}{5}} =$$

$$\text{b) } \frac{\frac{5}{8} + 1\frac{3}{4}}{1\frac{5}{6} - 2\frac{1}{4}} =$$

$$\text{c) } \frac{3\frac{2}{9} - 1\frac{2}{3}}{\frac{4}{15} + 1\frac{5}{6}} =$$

$$\text{d) } \frac{2\frac{7}{12} + 1\frac{3}{4}}{1\frac{8}{9} - 3\frac{5}{6}} =$$

$$\text{e) } \frac{2\frac{3}{16} - 1\frac{5}{8}}{1\frac{3}{4} + \frac{7}{8}} =$$

$$\text{f) } \frac{5\frac{4}{15} + 2\frac{5}{6}}{3\frac{1}{5} - 2\frac{7}{10}} =$$

$$\text{g) } \frac{2\frac{3}{7} - 1\frac{4}{5}}{1\frac{7}{10} + 2\frac{3}{4}} =$$

$$\text{h) } \frac{3\frac{5}{12} + 1\frac{5}{8}}{2\frac{4}{9} - 1\frac{5}{6}} =$$

Řešení:

$$\begin{aligned} \frac{1\frac{3}{7} - 2\frac{3}{5}}{2\frac{4}{9} + 1\frac{1}{5}} &= \frac{\frac{10}{7} - \frac{13}{5}}{\frac{22}{9} + \frac{6}{5}} = \frac{\frac{+50-91}{35}}{\frac{+110+54}{45}} = \frac{-\frac{41}{35}}{+\frac{164}{45}} = -\frac{41 \cdot 45}{164 \cdot 35} = -\frac{9}{28} \end{aligned}$$

a)

$$\begin{aligned} \frac{\frac{5}{8} + 1\frac{3}{4}}{1\frac{5}{6} - 2\frac{1}{4}} &= \frac{\frac{5}{8} + \frac{7}{4}}{\frac{11}{6} - \frac{9}{4}} = \frac{\frac{+5+14}{8}}{\frac{+22-27}{12}} = \frac{+\frac{19}{8}}{-\frac{5}{12}} = -\frac{19 \cdot 12}{5 \cdot 8} = -\frac{57}{10} = -5\frac{7}{10} \end{aligned}$$

b)

$$\begin{aligned} \frac{3\frac{2}{9} - 1\frac{2}{3}}{\frac{4}{15} + 1\frac{5}{6}} &= \frac{\frac{29}{9} - \frac{5}{3}}{\frac{4}{15} + \frac{11}{6}} = \frac{\frac{+29-15}{9}}{\frac{+8+55}{30}} = \frac{+\frac{14}{9}}{+\frac{63}{30}} = +\frac{14 \cdot 30}{63 \cdot 9} = +\frac{20}{27} \end{aligned}$$

c)

$$\begin{aligned} \frac{2\frac{7}{12} + 1\frac{3}{4}}{1\frac{8}{9} - 3\frac{5}{6}} &= \frac{\frac{31}{12} + \frac{7}{4}}{\frac{17}{9} - \frac{23}{6}} = \frac{\frac{+31+21}{12}}{\frac{+34-69}{18}} = \frac{+\frac{52}{12}}{-\frac{35}{18}} = -\frac{52 \cdot 18}{35 \cdot 12} = -\frac{78}{35} = -2\frac{8}{35} \end{aligned}$$

d)

$$\begin{aligned} \frac{2\frac{3}{16} - 1\frac{5}{8}}{1\frac{3}{4} + \frac{7}{8}} &= \frac{\frac{35}{16} - \frac{13}{8}}{\frac{7}{4} + \frac{7}{8}} = \frac{\frac{+35-26}{16}}{\frac{+14+7}{8}} = \frac{+\frac{9}{16}}{+\frac{21}{8}} = +\frac{9 \cdot 8}{21 \cdot 16} = +\frac{3}{14} \end{aligned}$$

e)

$$\begin{aligned} \frac{5\frac{4}{15} + 2\frac{5}{6}}{3\frac{1}{5} - 2\frac{7}{10}} &= \frac{\frac{79}{15} + \frac{17}{6}}{\frac{16}{5} - \frac{27}{10}} = \frac{\frac{+158+85}{30}}{\frac{+32-27}{10}} = \frac{+\frac{243}{30}}{+\frac{5}{10}} = +\frac{243 \cdot 10}{5 \cdot 30} = +\frac{81}{5} = +16\frac{1}{5} \end{aligned}$$

f)

$$\begin{aligned} \frac{2\frac{3}{7} - 1\frac{4}{5}}{1\frac{7}{10} + 2\frac{3}{4}} &= \frac{\frac{17}{7} - \frac{9}{5}}{\frac{17}{10} + \frac{11}{4}} = \frac{\frac{+85-63}{35}}{\frac{+34+55}{20}} = \frac{+\frac{22}{35}}{+\frac{89}{20}} = +\frac{22 \cdot 20}{89 \cdot 35} = +\frac{88}{623} \end{aligned}$$

g)

$$\begin{aligned} \frac{3\frac{5}{12} + 1\frac{5}{8}}{2\frac{4}{9} - 1\frac{5}{6}} &= \frac{\frac{41}{12} + \frac{13}{8}}{\frac{22}{9} - \frac{11}{6}} = \frac{\frac{+82+39}{24}}{\frac{+44-33}{18}} = \frac{+\frac{121}{24}}{+\frac{11}{18}} = +\frac{121 \cdot 18}{11 \cdot 24} = +\frac{33}{4} = +8\frac{1}{4} \end{aligned}$$

h)