

1) Vyhodnocení práce ve dvojicích:

1. Uspořádej zlomky od nejmenšího po největší: $\frac{3}{5}$; $\frac{8}{7}$; $\frac{17}{8}$; $\frac{7}{10}$ Zlomky menší než 1: $\frac{7}{10}$; $\frac{3}{5} = \frac{6}{10}$ tzn. $\frac{7}{10} > \frac{3}{5}$ Zlomky větší než 1: $\frac{17}{8} = \frac{119}{56}$; $\frac{8}{7} = \frac{64}{56}$ tzn. $\frac{17}{8} > \frac{8}{7}$ Z toho plyne: $\frac{3}{5} < \frac{7}{10} < \frac{8}{7} < \frac{17}{8}$

2 body

2. Vypočítej:

$$\frac{5}{21} + \frac{4}{7} + \frac{1}{3} = \frac{5+12+7}{21} = \frac{24}{21} = \frac{8}{7} = 1\frac{1}{7} \quad \frac{17}{4} - \frac{7}{8} = \frac{34-7}{8} = \frac{27}{8} = 3\frac{3}{8} \quad \frac{3}{5} \cdot \frac{20}{12} = \frac{1 \cdot 4}{1 \cdot 4} = \frac{4}{4} = 1$$

$$\frac{15}{2} \cdot \frac{3}{4} = \frac{15 \cdot 3}{2 \cdot 4} = \frac{5 \cdot 3}{1 \cdot 1} = \frac{15}{1} = 15$$

8 bodů

3. Vypočítej:

$$\left(\frac{2}{5} + \frac{3}{4}\right) \cdot \frac{5}{8} = \left(\frac{8}{20} + \frac{15}{20}\right) \cdot \frac{5}{8} = \frac{23}{20} \cdot \frac{5}{8} = \frac{23 \cdot 1}{4 \cdot 8} = \frac{23}{32} \quad \frac{2}{3} : \left(\frac{5}{7} \cdot \frac{14}{8}\right) = \frac{2}{3} : \left(\frac{5 \cdot 2}{1 \cdot 8}\right) = \frac{2}{3} : \frac{10}{8} = \frac{2}{3} \cdot \frac{8}{10} = \frac{8}{15}$$

$$\left(\frac{1}{2} + \frac{2}{5}\right) : \left(\frac{3}{4} - \frac{2}{5}\right) = \left(\frac{5+4}{10}\right) : \left(\frac{15-8}{20}\right) = \frac{9}{10} : \frac{7}{20} = \frac{9}{10} \cdot \frac{20}{7} = \frac{18}{7} = 2\frac{4}{7}$$

$$\frac{5}{6} : \frac{4}{18} + \frac{5}{7} \cdot \frac{14}{3} = \frac{5}{6} \cdot \frac{18}{4} + \frac{5 \cdot 2}{1 \cdot 3} = \frac{5 \cdot 3}{1 \cdot 4} + \frac{10}{3} = \frac{15}{4} + \frac{10}{3} = \frac{45+40}{12} = \frac{85}{12} = 7\frac{1}{12}$$

10 bodů

2) rovnice se zlomky:

$$\frac{u}{5} - 1 = 7 - \frac{u}{3}$$

$$2 + \frac{z}{4} = 4 + \frac{z}{2}$$