ΣΥΝΘΕΤΑ ΚΛΑΣΜΑΤΑ

$$\frac{\alpha}{\beta} : \frac{\gamma}{\delta} = \frac{\frac{\alpha}{\beta}}{\frac{\gamma}{\delta}} = \frac{\alpha\delta}{\beta\gamma}$$

$$\frac{\alpha}{\beta} : \frac{\gamma}{\delta} = \frac{\alpha}{\beta} \cdot \frac{\delta}{\gamma} = \frac{\alpha\delta}{\beta\gamma}$$

Πχ

$$\frac{\frac{3}{4}}{\frac{5}{2}} = \frac{3 \cdot 2}{4 \cdot 5} = \frac{6}{20} \overset{:2}{\underset{:2}{=}} \frac{3}{10}$$

Πχ

$$\frac{\frac{7}{3}}{\frac{1}{2}} = \frac{7 \cdot 2}{3 \cdot 1} = \frac{14}{3}$$

Πχ

$$\frac{\frac{3}{2}}{\frac{3}{4}} = \frac{3 \cdot \overset{2}{4}}{\underset{1}{2} \cdot 3} = \frac{2}{1} = 2$$

Πχ

$$\frac{\frac{3}{2}}{\frac{5}{6}} = \frac{3 \cdot \overset{3}{6}}{\underset{1}{2} \cdot 5} = \frac{3 \cdot 3}{1 \cdot 5} = \frac{9}{5}$$

nx

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

nx

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

nx

$$\frac{\frac{3}{2}}{\frac{4}{3}} = \frac{3 \cdot 3}{2 \cdot 4} = \frac{9}{8}$$

nx

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

nx

$$\frac{\frac{4}{7}}{\frac{3}{2}} = \frac{4 \cdot 2}{7 \cdot 3} = \frac{8}{21}$$

$$\frac{\overset{2}{\smile}\quad\overset{1}{\smile}}{\frac{3}{5}+\frac{4}{10}} \rightarrow \frac{\frac{6}{10}+\frac{4}{10}}{\frac{1}{4}+\frac{3}{4}} = \frac{\frac{10}{10}}{\frac{4}{4}} = \frac{1}{1} = 1$$

Πχ $\overset{1}{\smile}\quad\overset{5}{\smile}$

$$\frac{\frac{3}{10}+\frac{1}{2}}{\underset{\frac{4}{3}}{\overset{2}{\smile}}-\underset{\frac{4}{6}}{\overset{1}{\smile}}} = \frac{\frac{3}{10}+\frac{5}{10}}{\frac{8}{6}-\frac{4}{6}} = \frac{\frac{8}{10}}{\frac{4}{6}} = \frac{\overset{2}{\cancel{8}}\cdot\overset{3}{6}}{\cancel{4}\cdot\cancel{10}_{5}^{1}}$$

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

Ένας "διαφορετικός" τρόπος.

Γνωρίζω ότι $\frac{\alpha}{\beta} = \frac{\alpha\cdot\gamma}{\beta\cdot\gamma}$ πχ $\frac{3}{4} \overset{\cdot 2}{=\!=} \frac{6}{8}$ $\quad$ $\frac{8}{10} \overset{:2}{=\!=} \frac{4}{5}$

$\text{ΕΚΠ}(4,2)=4$

$$\frac{\frac{3}{\cancel{4}}}{\frac{5}{\cancel{2}}} \quad \frac{\cdot\cancel{4}}{\cdot\cancel{4}^{2}} \quad \frac{3}{5\cdot 2} = \frac{3}{10}$$

$$\left(\frac{\frac{3}{4}}{\frac{5}{2}}\right) = \frac{3\cdot 2}{4\cdot 5} = \frac{6}{20} \overset{:2}{=\!=} \frac{3}{10}$$