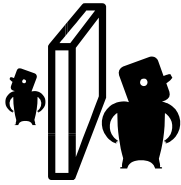


INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ



NÁSOBENÍ ZLOMKŮ

(M-07-15)

Dané příklady vypočítej tak, aby byl výsledek vždy zlomek v základním tvaru.

$$1) \frac{4}{7} \cdot \frac{21}{9} = \frac{4 \cdot 21}{7 \cdot 9} = \frac{4 \cdot 3}{1 \cdot 9} = \frac{12}{9} = \frac{4}{3} = \underline{\underline{1 \frac{1}{3}}}$$

$$2) \frac{45}{7} \cdot \frac{21}{5} \cdot \frac{10}{4} = \frac{45 \cdot 21 \cdot 10}{7 \cdot 5 \cdot 4} = \frac{9 \cdot 3 \cdot 5}{1 \cdot 1 \cdot 2} = \frac{105}{2} = \underline{\underline{52 \frac{1}{2}}}$$

$$3) \frac{15}{24} \cdot \frac{8}{6} = \frac{15 \cdot 8}{24 \cdot 6} = \frac{5 \cdot 1}{3 \cdot 2} = \frac{5}{6}$$

$$4) \frac{72}{56} \cdot \frac{8}{18} = \frac{72 \cdot 8}{56 \cdot 18} = \frac{8 \cdot 1}{7 \cdot 2} = \frac{4}{7}$$

$$5) \frac{7}{13} \cdot 5 = \frac{7 \cdot 5}{13 \cdot 1} = \frac{35}{13} = \underline{\underline{2 \frac{9}{13}}}$$

$$6) 8 \cdot \frac{7}{4} = \frac{8 \cdot 7}{1 \cdot 4} = \frac{2 \cdot 7}{1} = \underline{\underline{14}}$$

$$7) \frac{2}{3} \cdot \left(\frac{3}{14} + \frac{5}{9} \right) = \frac{2}{3} \cdot \left(\frac{3 \cdot 9 + 5 \cdot 14}{14 \cdot 9} \right) = \frac{2}{3} \cdot \left(\frac{27 + 70}{126} \right) = \frac{2}{3} \cdot \frac{97}{126} = \frac{1 \cdot 97}{3 \cdot 63} = \frac{97}{189}$$

$$8) \left(\frac{7}{8} + \frac{4}{5} \right) \cdot \frac{4}{11} = \left(\frac{7 \cdot 5 + 4 \cdot 8}{8 \cdot 5} \right) \cdot \frac{4}{11} = \frac{35 + 32}{40} \cdot \frac{4}{11} = \frac{67}{40} \cdot \frac{4}{11} = \frac{67 \cdot 1}{10 \cdot 11} = \frac{67}{110}$$

$$9) \frac{7}{12} + \frac{3}{4} \cdot \left(\frac{7}{9} - \frac{1}{3} \right) = \frac{7}{12} + \frac{3}{4} \cdot \left(\frac{7 \cdot 3 - 1 \cdot 9}{9 \cdot 3} \right) = \frac{7}{12} + \frac{3}{4} \cdot \frac{21 - 9}{27} = \frac{7}{12} + \frac{3}{4} \cdot \frac{12}{27} = \frac{7}{12} + \frac{1 \cdot 3}{1 \cdot 9} = \frac{7}{12} + \frac{1}{3} = \frac{7 \cdot 1 + 1 \cdot 12}{12 \cdot 3} = \frac{7 + 12}{36} = \frac{19}{36} = \underline{\underline{\frac{11}{12}}}$$

$$10) \frac{15}{16} + \left(\frac{4}{5} + \frac{8}{9} \right) \cdot 7 = \frac{15}{16} + \left(\frac{4 \cdot 9 + 8 \cdot 5}{5 \cdot 9} \right) \cdot \frac{7}{1} = \frac{15}{16} + \left(\frac{36 + 40}{45} \right) \cdot \frac{7}{1} = \frac{15}{16} + \left(\frac{76}{45} \right) \cdot \frac{7}{1} = \frac{15}{16} + \frac{532}{45} = \frac{15 \cdot 45 + 532 \cdot 16}{16 \cdot 45} = \frac{675 + 8512}{720} = \frac{9187}{720} = \underline{\underline{12 \frac{547}{720}}}$$