

Počtení operace**A****Úloha 1**

Počtení operace A

a) $(0,08 - 1) : 0,2 =$

b) $20 - 3 \cdot (30 - 30 : 2) =$

c) $20 \cdot (30 - 20 \cdot 3) - 700 =$

d) $5 + 3 \cdot (-2) - (5 + 2 : 2) =$

e) $4 + 6 : 2 - 5 \cdot (-3 + 5) =$

f) $0,5 - (-0,3 + 0,5) \cdot 2,1 =$

g) $0,5 \cdot 0,06 - 0,09 : 0,1 =$

h) $40 - 20 \cdot (-6) : 4 - 5 \cdot (4 + 12 : 4) =$

i) $5 : 0,2 - (-0,3 + 0,5) =$

Zlomky

B

Úloha 1

Zlomky B

$$\text{a) } \frac{\frac{1}{4} + \frac{2}{3}}{\left(3 - \frac{9}{4}\right) \cdot \frac{8}{3}} =$$

$$\text{b) } 3 : \frac{2 \cdot 6}{2+6} - \frac{12}{3} \cdot \frac{5}{8} =$$

$$\text{c) } \left(\frac{5}{8} \cdot \frac{10}{9} - \frac{4}{9}\right) : \left(8 \cdot \frac{1}{6}\right) =$$

$$\text{d) } \frac{2 - \frac{13}{10}}{\frac{5}{3} - \frac{1}{2}} =$$

$$\text{e) } \frac{8}{5} \cdot \left(\frac{5}{6} \cdot \frac{7}{10} - \frac{5}{6}\right) =$$

$$\text{f) } \frac{\left(\frac{4}{5} - \frac{2}{3}\right) \cdot \frac{5}{8}}{\frac{2}{3}} =$$

Úloha 2

Zlomky B

a) $\frac{5}{9} - \frac{5}{9} : 5 =$

b) $\frac{\frac{1}{4} - \frac{5}{8}}{3 \cdot \frac{5}{12}} =$

c) $\frac{1}{3} \cdot \frac{1}{2} - \frac{8}{9} =$

d) $\left(2 - \frac{5}{6}\right) : \frac{5}{3} =$

e) $\frac{\frac{2}{3} + \frac{2}{7}}{\left(\frac{9}{14} + \frac{3}{2}\right) \cdot 2} =$

f) $\left(\frac{3}{4} + \frac{13}{6}\right) \cdot \left(\frac{2}{5} - 1\right) =$

g) $\frac{\frac{3}{5} \cdot 2 - 4 \cdot \frac{2}{7}}{2} =$

Úloha 3

Zlomky B

a) $\frac{1}{3} \cdot \left(5 - \frac{13}{5}\right) : 20 =$

b) $\frac{4-7}{8} \cdot \frac{16}{21} =$

c) $\frac{\frac{3}{5} : \left(\frac{2}{5} + \frac{1}{2}\right)}{\frac{7}{6} + \frac{7}{10}} =$

d) $\frac{2 - \frac{4}{7}}{3 - \frac{13}{21}} =$

e) $\left(\frac{3}{8} - \frac{2}{5}\right) \cdot 5 - \frac{3}{4} =$

f) $\frac{7}{5} \cdot \frac{3}{8} \cdot \frac{10}{21} + \frac{3}{10} =$

g) $\frac{\frac{2}{3} - \frac{3}{2}}{\frac{2}{3} : \frac{3}{2}} =$

Úloha 4

Zlomky B

a) $\left(\frac{5}{8} - \frac{5}{12}\right) \cdot 4 - 2 \cdot \left(\frac{3}{4} - \frac{2}{3}\right) =$

b) $\frac{\left(\frac{27}{10} \cdot \frac{5}{9} - 4\right) : 3}{5} =$

c) $\frac{0,25}{0,025} : 0,2 =$

d) $\left(\frac{12}{5} \cdot \frac{3}{20} - \frac{3}{20}\right) : \frac{7}{25} =$

e) $\frac{12}{2 + \frac{2}{3}} \cdot \frac{2 \cdot \frac{2}{3}}{18} =$

f) $\frac{\frac{2}{3} - 1}{\frac{8}{9}} =$

g) $2 \cdot \frac{1}{6} - \frac{3}{8} \cdot 4 =$

Úloha 5

Zlomky B

$$\text{a) } \frac{\frac{6}{7} - \frac{9}{14}}{\frac{8}{7} + \frac{6}{7} : \frac{3}{2}} =$$

$$\text{b) } 2 - 2 \cdot \frac{2 \cdot \frac{9}{10}}{3} =$$

$$\text{c) } \frac{1}{2} + \frac{8}{5} \cdot \left(\frac{3}{8} - \frac{1}{6} \right) =$$

$$\text{d) } \frac{\frac{7}{4} - 4}{7 - \frac{4}{7}} =$$

$$\text{e) } 3 \cdot \frac{2}{7} - \frac{2}{7} =$$

$$\text{f) } \frac{1}{6} + \frac{2}{3} \cdot \frac{9}{8} =$$

$$\text{g) } \frac{2}{3} : \frac{5}{2} - \frac{2}{3} =$$

Úloha 6

Zlomky B

a) $1 - \frac{14}{5} : 2 =$

b) $\frac{\frac{3}{4} + \frac{4}{3}}{\frac{5}{7} \cdot \frac{14}{3}} =$

c) $3 \cdot \frac{2}{15} + \frac{1}{3} \cdot \frac{2}{15} =$

d) $\frac{\frac{2}{3} - \frac{5}{6}}{\frac{2}{3}} =$

e) $6 \cdot \frac{-15 - 6 \cdot (-2)}{2} =$

f) $0,2 : \frac{27}{25} - \frac{2}{3} =$

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

Úloha 7

Zlomky B

a) $2 - \frac{1}{3} - \frac{1}{6} \cdot \frac{16}{3} =$

b) $\frac{\frac{7}{10} - \frac{2}{5} : \frac{1}{10}}{20 \cdot \frac{3}{10}} =$

c) $100 - \frac{1}{0,01 \cdot 0,1} =$

d) $\frac{\frac{4}{1+2} - 1}{1+2} =$

e) $\left(2 - \frac{7}{8}\right) \cdot \frac{8}{9} : \left(\frac{5}{8} + \frac{5}{6}\right) =$

f) $\left(0,5 + \frac{2}{5}\right) : \left(2 - \frac{7}{8}\right) =$

g) $\frac{3 \cdot \frac{2}{9} - \frac{3}{5} : \frac{6}{15}}{2} =$

Úloha 8

Zlomky B

a)
$$\frac{5}{3} \cdot \frac{9}{50} \cdot \left(1 - \frac{4}{9}\right) - \frac{2}{3} =$$

b)
$$\frac{2 - \frac{3}{5} \cdot \frac{5}{2}}{2} =$$

c)
$$\left(\frac{1}{4} + \frac{5}{6}\right) \cdot \left(\frac{5}{13} - \frac{1}{2}\right) =$$

d)
$$\frac{\frac{6}{5}}{\frac{7}{6} \cdot 4 - 4 \cdot \frac{5}{12}} =$$

e)
$$0,2 - 0,2 \cdot \frac{5}{12} - \left(-\frac{7}{30}\right) =$$

f)
$$\frac{\frac{1}{4} + \frac{1}{6}}{\frac{4}{9} - \frac{5}{6} \cdot \frac{2}{15}} =$$

g)
$$\left(2 : \frac{3}{2}\right) : \frac{1}{2} + \left(\frac{5}{6} : \frac{3}{4}\right) : \frac{2}{3} =$$

Úloha 9

Zlomky B

$$\text{a) } \frac{\frac{13}{10} - 1,4}{\frac{2}{15} + \frac{1}{6}} =$$

$$\text{b) } (6-4) \cdot \frac{11}{8} + \frac{9}{14} \cdot \frac{7}{6} =$$

$$\text{c) } \frac{2\frac{2}{3} - 1\frac{3}{5}}{2\frac{2}{3}} =$$

$$\text{d) } \frac{\frac{2 \cdot 3}{6} - \frac{4}{2 \cdot 3}}{\frac{2+3}{6}} =$$

$$\text{e) } 12 \cdot \left(\frac{2}{3} - \frac{1}{2} \right) - \frac{5}{2} + \frac{2}{3} =$$

$$\text{f) } \left(\frac{3}{4} + \frac{4}{3} \right) \cdot \left(\frac{2}{3} - \frac{6}{5} \right) =$$

$$\text{g) } \frac{\frac{5}{9} - \frac{3}{2} : \frac{3}{5}}{\frac{2}{3} + \frac{1}{6} - \frac{7}{12}} =$$

Úloha 10

Zlomky B

$$\text{a) } \frac{\frac{7}{5} + 3,3 - \frac{1}{2}}{\frac{1}{15} + \frac{1}{3}} =$$

$$\text{b) } \left(\frac{1}{2} + \frac{1}{3} : \frac{5}{6} \right) - \frac{7}{2} + \frac{3}{5} : \frac{3}{2} - 1 =$$

$$\text{c) } \frac{\left(\frac{1}{6} - \frac{1}{3} \right) : \left(-\frac{5}{3} \right)}{0,3} =$$

$$\text{d) } \frac{1}{6} + \frac{1}{3} \cdot \left(\frac{2}{5} - 1 \right) =$$

$$\text{e) } \frac{7}{12} - \frac{5}{8} \cdot 1,6 =$$

Mocniny**C****Úloha 1****Mocniny C**

a) $25,6:0,2 - 10^2 \cdot 0,029 =$

b) $(-3)^2 - 5^2 - 4 \cdot (-4) =$

c) $(-6)^2 - 3 \cdot (-3) =$

d) $1:0,2^2 =$

e) $\frac{\frac{5}{2} - \frac{2}{5}}{(-7)^2} =$

f) $0,005 \cdot 10^2 - 1,2:0,02 =$

g) $(-0,4)^2 + 0,3^2 =$

h) $(-0,4)^2 + 0,3 =$

i) $0,5:0,5^2 =$

Úloha 2Mocniny C

a) $\frac{0,3^2}{0,1} : 0,01 =$

b) $\frac{3}{4} : \frac{15}{2} - \left(\frac{3}{5}\right)^2 =$

c) $\frac{10^2 \cdot (10^2 - 1)}{10 \cdot 10^2 + 10^2} =$

d) $\frac{3^2}{5} - \frac{3}{5^2} + \left(-\frac{3}{5}\right)^2 =$

e) $\frac{1 - \frac{1}{3}}{-6^2} =$

f) $(1,5^2 - 0,3^2) : 6 =$

Odmocniny**D****Úloha 1**

Odmocniny D

a) $\sqrt{10^2 \cdot 0,0025} =$

b) $(9 - \sqrt{9})^2 - (\sqrt{9})^2 =$

c) $100 + 1 : \sqrt{6\,400 + 60^2} =$

d) $\sqrt{14,4 : 0,001} =$

e) $\sqrt{1^2 - 0,6^2} =$

f) $\sqrt{4 \cdot 0,25} =$

g) $\sqrt{1,3^2 - 1,2^2} =$

h) $\sqrt{(-5)^2} - 3^2 =$

i) $\frac{\sqrt{1,2^2}}{0,01} - \frac{(\sqrt{0,01})^2}{10} \cdot 3\,600 =$

Úloha 2

Odmocniny D

a) $\frac{7^2 - \sqrt{7^2}}{\sqrt{49}} =$

b) $\sqrt{\frac{16}{0,1} + 9} =$

c) $1 - \sqrt{\frac{25}{64}} =$

d) $\sqrt{\frac{2 \cdot 2^2}{3}} \cdot \sqrt{\frac{3}{2}} =$

e) Doplňte číslo do rámečku tak, aby platila rovnost: $\left(\frac{2}{3}\right)^2 = \frac{2}{3} \cdot \boxed{}$

f) Doplňte číslo do rámečku tak, aby platila rovnost: $\left(\frac{1}{3}\right)^2 - \sqrt{\frac{4}{9}} = \boxed{}$

g) Doplňte číslo do rámečku tak, aby platila rovnost: $\left(\frac{2}{4}\right)^2 + \boxed{} = \frac{5}{8}$