

MAT 7, Računanje z ulomki

Ime in priimek: _____



1. Izračunaj, rezultate zapiši z okrajšanim ulomkom. Če je rezultat ulomek večji od 1, ga zapiši s celim delom in ulomkom manjšim od 1.

a) $\frac{2}{12} + \frac{17}{12} = \frac{19}{12} = 1\frac{7}{12}$

b) $3\frac{3}{7} + 4\frac{6}{7} = 7\frac{9}{7} = 8\frac{2}{7}$

c) $4\frac{1}{3} + 10\frac{3}{4} = 4\frac{4}{12} + 10\frac{9}{12} = 14\frac{13}{12} = 15\frac{1}{12}$

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

d) $1\frac{5}{16} \cdot 1\frac{6}{18} = \frac{21}{16} \cdot \frac{24}{18} = \frac{7}{4} = 1\frac{3}{4}$

e) $6\frac{2}{3} : \frac{15}{21} = \frac{20}{3} : \frac{15}{21} = \frac{20 \cdot 21}{3 \cdot 15} = \frac{28}{3} = 9\frac{1}{3}$

f) $8 : 4\frac{4}{5} = \frac{8}{1} : \frac{24}{5} = \frac{5}{3} = 1\frac{2}{3}$

g) $13 - 7\frac{3}{7} = 12\frac{7}{7} - 7\frac{3}{7} = 5\frac{4}{7}$

h) $\frac{9}{16} \cdot 0,8 \cdot \frac{5}{6} = \frac{9}{16} \cdot \frac{8}{10} \cdot \frac{5}{6} = \frac{3}{8}$

i) $\frac{1\frac{3}{9}}{\frac{10}{9}} = \frac{1\frac{1}{3}}{\frac{10}{9}} = \frac{4}{3} : \frac{10}{9} = \frac{4 \cdot 9}{3 \cdot 10} = \frac{6}{5} = 1\frac{1}{5}$

$8\frac{2}{7}$ $1\frac{3}{4}$ $\frac{3}{8}$ $1\frac{7}{12}$ $1\frac{2}{3}$ $5\frac{1}{12}$ $15\frac{1}{12}$ $5\frac{4}{7}$ $9\frac{1}{3}$ $1\frac{1}{5}$

2. Izračunaj vrednost izraza. Rezultate zapiši z okrajšanim ulomkom. Če je rezultat ulomek večji od 1, zapiši s celim delom in ulomkom manjšim od 1.

a.)

$$5\frac{8}{9} - 1\frac{2}{3} = 5\frac{8}{9} - 1\frac{6}{9} = 4\frac{2}{9}$$

$$\frac{5}{8} : 3\frac{3}{4} =$$

$$\frac{5}{8} : \frac{15}{4} = \frac{5}{8} \cdot \frac{4}{15} = \frac{1}{6}$$

$$0,7 \cdot \frac{5}{28} =$$

$$0,7 \cdot \frac{5}{28} = \frac{7}{10} \cdot \frac{5}{28} = \frac{1}{8}$$

1,3

$\frac{1}{8}$

$10\frac{1}{5}$

$4\frac{2}{9}$

$\frac{1}{6}$

$3\frac{1}{4}$

b.) $2,5 + 3\frac{2}{3} \cdot (4\frac{1,5}{2,5} - 2\frac{2}{5}) =$

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

$$= 2\frac{5}{10} + 3\frac{2}{3} \cdot 2\frac{1}{10} =$$

$$= 2\frac{5}{10} + \frac{11}{3} \cdot \frac{21}{10} =$$

$$= 2\frac{5}{10} + \frac{77}{10} =$$

$$= 2\frac{5}{10} + 7\frac{7}{10} =$$

$$= 9\frac{12}{10} = 10\frac{2}{10} = 10\frac{1}{5}$$

c.) $7\frac{5}{12} - 3\frac{1}{3} \cdot 1\frac{1}{4} =$

$$= 7\frac{5}{12} - \frac{10}{3} \cdot \frac{5}{4} =$$

$$= 7\frac{5}{12} - \frac{25}{6} =$$

$$= 7\frac{5}{12} - 4\frac{1}{6} =$$

$$= 7\frac{5}{12} - 4\frac{2}{12} =$$

$$= 3\frac{3}{12} =$$

$$= 3\frac{1}{4}$$

č.) $\frac{3}{5} + \left(\frac{7}{12} : \left(\frac{1,3}{2,3} + \frac{5}{6} \right) \right) : \frac{15}{24} =$

$$= \frac{3}{5} + \left(\frac{7}{12} : \left(\frac{3}{6} + \frac{5}{6} \right) \right) : \frac{15}{24} =$$

$$= \frac{3}{5} + \left(\frac{7}{12} : \frac{8}{6} \right) : \frac{15}{24} =$$

$$= \frac{3}{5} + \left(\frac{7}{12} \cdot \frac{6}{8} \right) : \frac{15}{24} =$$

$$= \frac{3}{5} + \frac{7}{16} : \frac{15}{24} =$$

$$= \frac{3}{5} + \frac{7}{16} \cdot \frac{24}{15} =$$

$$= \frac{3}{5} + \frac{7}{10} =$$

$$= \frac{6}{10} + \frac{7}{10} =$$

$$= \frac{13}{10} = 1\frac{3}{10} = 1,3$$