Preverjanje znanja - številski izrazi
Rešitve

① a) $\frac{3}{5}+\frac{2}{5} \square \frac{3}{4}\cdot\frac{4}{3}$

$\frac{5}{5}=1 \quad \boxed{=} \quad \frac{1}{1}=1$

b) $1+2\cdot\frac{1}{2} \square 2\cdot\frac{1}{2}-\frac{1}{2}$

$1+1=2 \qquad 1-\frac{1}{2}=\frac{1}{2}$

$2 \boxed{>} \frac{1}{2}$

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

$\frac{5}{8}\cdot 8=5 \quad \boxed{<} \quad 5\frac{1}{2}$

② • $\frac{7}{9}+\frac{5}{6} \neq \frac{12}{15}$ (N)

Popravek: $\frac{7}{9}+\frac{5}{6}=\frac{28}{36}+\frac{30}{36}=\frac{58}{36}=$

$=1\frac{22}{36}=1\frac{11}{18}$

• $6-3\frac{3}{4} \neq 3\frac{3}{4}$ (N)

Popravek:

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

• $3\frac{2}{3}\,m > 365\,cm$ P

Razlaga:

$365\,cm=3{,}65\,m=3\frac{65}{100}\,m=$

$=3\frac{13}{20}\,m=3\frac{39}{60}\,m$

$3\frac{2}{3}\,m=3\frac{40}{60}\,m$

N

• Desetiški ulomki: $\frac{1}{2}, \frac{3}{10}, \frac{2}{5}\ldots$

Ulomek, ki ima vrednost 0 $\left(\frac{0}{5}=\frac{0}{7}=\ldots\right)$, nima obratne vrednosti. Vsi ostali ulomki imajo obratno vrednost.

3.a) $\frac{\cancel{54}^{6}}{\cancel{49}_{7}} \cdot \frac{\cancel{21}^{3}}{\cancel{45}_{5}} = \frac{6 \cdot 3}{7 \cdot 5} = \frac{18}{35}$

b) $9\frac{4}{5} : 3\frac{1}{2} =$

$= \frac{49}{5} : \frac{7}{2} =$

$= \frac{\cancel{49}^{7}}{5} \cdot \frac{2}{\cancel{7}_{1}} =$

$= \frac{14}{5} = 2\frac{4}{5}$

c) $3\frac{5}{8} + 2\frac{2}{5} =$

$= 3\frac{25}{40} + 2\frac{16}{40} =$

$= 5\frac{41}{40} = 6\frac{1}{40}$

c) $\frac{7}{8} - \frac{3}{4} + \frac{4}{5} =$

$= \frac{35}{40} - \frac{30}{40} + \frac{32}{40} =$

$= \frac{37}{40}$

d) $\frac{2\frac{1}{4}}{\frac{15}{16}} = 2\frac{1}{4} : \frac{15}{16} = \frac{\cancel{9}^{3}}{\cancel{4}_{1}} \cdot \frac{\cancel{16}^{4}}{\cancel{15}_{5}} = \frac{12}{5}$

$= 2\frac{2}{5}$

e) $4\frac{1}{6} : 2{,}5 + 3\frac{3}{4} \cdot 1{,}2 =$

$= \frac{25}{6} : \frac{25}{10} + \frac{\cancel{15}^{3}}{\cancel{4}_{1}} \cdot \frac{\cancel{12}^{3}}{\cancel{10}_{2}} =$

$= \frac{\cancel{25}^{1}}{\cancel{6}_{3}} \cdot \frac{\cancel{10}^{5}}{\cancel{25}_{1}} + \frac{3}{1} \cdot \frac{3}{2} =$

$= \frac{5}{3} + \frac{9}{2} =$

$= \frac{10}{6} + \frac{27}{6} =$

$= \frac{37}{6} = 6\frac{1}{6}$

f) $5 - 3\frac{1}{2} \cdot \frac{4}{5} + 1\frac{1}{2} : 2 =$

$= 5 - \frac{7}{\cancel{2}_{1}} \cdot \frac{\cancel{4}^{2}}{5} + \frac{3}{2} : \frac{2}{1} =$

$= 5 - \frac{14}{5} + \frac{3}{2} \cdot \frac{1}{2} =$

$= 5 - 2\frac{4}{5} + \frac{3}{4} =$

$= 2\frac{1}{5} + \frac{3}{4} = 2\frac{4}{20} + \frac{15}{20} = 2\frac{19}{20}$

g) $\left(4\frac{2}{5} - 2\frac{3}{4}\right) : 1\frac{1}{10} =$

$= \left(4\frac{16}{40} - 2\frac{30}{40}\right) : 1\frac{1}{10} =$

$= \left(3\frac{56}{40} - 2\frac{30}{40}\right) : \frac{11}{10} =$

$= 1\frac{26}{40} \cdot \frac{10}{11} =$

$= \frac{\cancel{66}^{6}}{\cancel{40}_{4}} \cdot \frac{\cancel{10}^{1}}{\cancel{11}_{1}}$

$= \frac{6}{4} = \frac{3}{2} = 1\frac{1}{2}$

h) $8\frac{1}{4} - 3\frac{2}{5} \cdot 2 + 5 : 0{,}1 - 0{,}01 =$

$= 8\frac{1}{4} - \frac{17}{5} \cdot 2 + 5 : \frac{1}{10} - \frac{1}{100} =$

$= 8\frac{1}{4} - \frac{34}{5} + 5 \cdot \frac{10}{1} - \frac{1}{100} =$

$= 8\frac{5}{20} - 6\frac{16}{20} + 50 - \frac{1}{100} =$

$= \underbrace{7\frac{25}{20} - 6\frac{16}{20} + 50} - \frac{1}{100} =$

$= 51\frac{9}{20} - \frac{1}{100} =$

$= 51\frac{45}{100} - \frac{1}{100} = 51\frac{44}{100} = 51\frac{22}{50}$

4. a) $\frac{28}{10} \cdot 2{,}8 \stackrel{?}{=} 1$

$\frac{28}{10} \cdot \frac{28}{10} \neq 1$

b) $\frac{10}{28} \cdot 2{,}8 \stackrel{?}{=} 1$

$\frac{10}{28} \cdot \frac{28}{10} = 1$ ✓DA

c) $\frac{82}{10} \cdot 2{,}8 \stackrel{?}{=} 1$

$\frac{82}{10} \cdot \frac{28}{10} \neq 1$

c) $\frac{28}{10} \cdot 2{,}8 \neq 1$

d) $\frac{14}{5} \cdot 2{,}8 \stackrel{?}{=} 1$

$\frac{14}{5} \cdot \frac{28}{10} \neq 1$

e) $\frac{5}{14} \cdot 2{,}8 \stackrel{?}{=} 1$

$\frac{\cancel{5}^{1}}{\cancel{14}_{1}} \cdot \frac{\cancel{28}^{2}}{\cancel{10}_{2}} \stackrel{?}{=} 1$

$\frac{2}{2} = 1$ ✓DA

5. $5 \div 2\frac{4}{15} \div 4\frac{2}{7} : \frac{1}{7} =$

$5 \cdot 2\frac{4}{15} - \frac{1}{7} : 4\frac{2}{7}$ — PRAVILNO

6. ROK

dolžina $3\frac{9}{10}$ m

širina $\frac{5}{9}$ od dolžine

$= \frac{5}{9} \cdot 3\frac{9}{10} =$

$= \frac{\cancel{5}}{9} \cdot \frac{39}{\cancel{10}_{2}} =$

$= \frac{39}{18} = 2\frac{3}{18} =$

$= 2\frac{1}{6}$ m je dolžina

ŠPELA

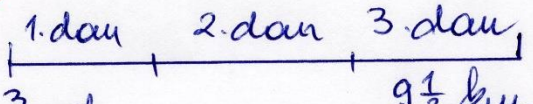
$\frac{1}{2}$ od $3\frac{9}{10} = \frac{1}{2} \cdot \frac{39}{10} = \frac{39}{20} = 1\frac{19}{20}$ m

$2 \cdot 2\frac{1}{6} = 2 \cdot \frac{13}{\cancel{6}_{3}} = \frac{13}{3} = 4\frac{1}{3}$ m

Izrax: $2 \cdot \left(\frac{5}{9} \cdot 3\frac{9}{10}\right) = 4\frac{1}{3}$ m

Odg.: Dolžina Špeline sobe je $1\frac{19}{20}$ m, širina pa $4\frac{1}{3}$ m.

7.



$\frac{3}{4}$ od 2. dne

$9\frac{1}{2}$ km $= 1\frac{2}{5}$ km + 1. dan

1. dan + 2. dan + 3. dan = ?

?

1. dan .... $\frac{3}{4}$ od 2. dne

2. dan ... ?

3. dan .... $9\frac{1}{2}$ km = $1\frac{2}{5}$ km + 1. dan

$9\frac{1}{2}$ km = $1\frac{2}{5}$ km + [?]

[?] = $9\frac{1}{2}$ km − $1\frac{2}{5}$ km

= $9\frac{5}{10} - 1\frac{4}{10}$ =

= $8\frac{1}{10}$ km

1. negotovitev:
Prvi dan je prehodil $8\frac{1}{10}$ km.

1. dan ... $\frac{3}{4}$ od 2. dne = ?

$8\frac{1}{10}$ km = $\frac{3}{4}$ od 2. dne ⇒ 2. dan je $\frac{4}{4}$

$\frac{81}{10} : 3 = \frac{81^{27}}{10} \cdot \frac{1}{3_1} = \frac{27}{10} = 2{,}7$ km ... 1 del

2,7 km · 4 ... 4 deli

10,8 km

2. negotovitev: Drugi dan je prehodil 10,8 km.

3. negotovitev:

$8\frac{1}{10}$ km + 10,8 km + $9\frac{1}{2}$ km =

= 8,1 km + 10,8 km + 9,5 km =

= 28,4 km. – celotna pot.

Celotna pot meri 28,4 km.