

$$\frac{1}{5}$$

$$\frac{8}{26}$$

$$\frac{12}{6}$$

$$\frac{76}{32}$$

RAZLOMCI

MATEMATIČKA

SLIKOVNICA

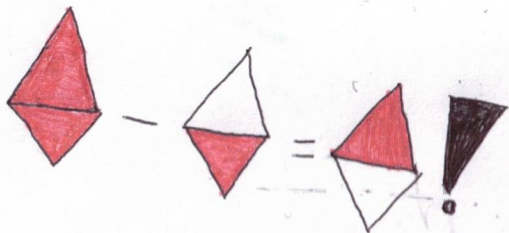
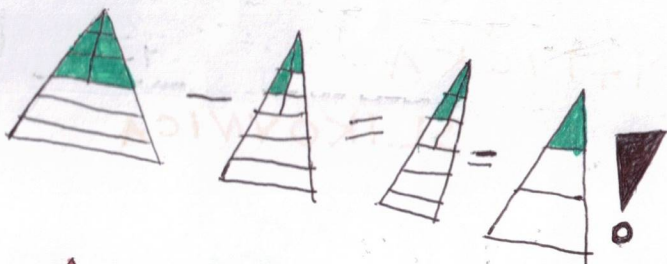
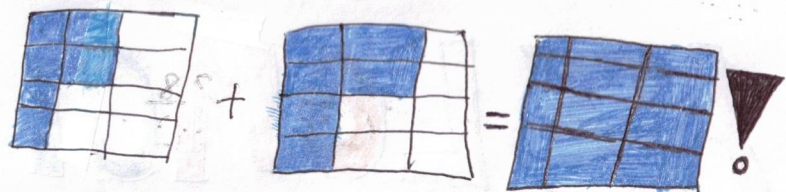
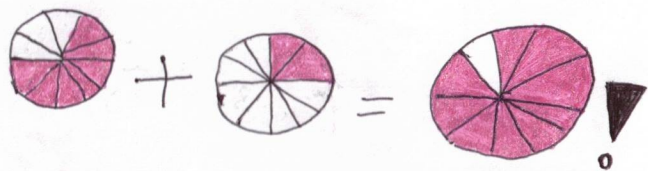
$$\frac{13}{39}$$

$$\frac{2}{26}$$

$$\frac{11}{88}$$

$$\frac{20}{80}$$

BORNA BLAŠKOVIC G.B



1. Izračunaj.

a) $\frac{7}{10} + \frac{2}{10}$, b) $\frac{6}{7} + \frac{8}{7}$, c) $\frac{6}{12} + \frac{6}{12}$,

d) $\frac{7}{16} + \frac{1}{16}$, e) $\frac{2}{9} + \frac{4}{9}$, f) $\frac{3}{18} + \frac{6}{18}$.

2. Izračunaj:

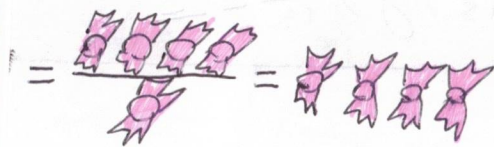
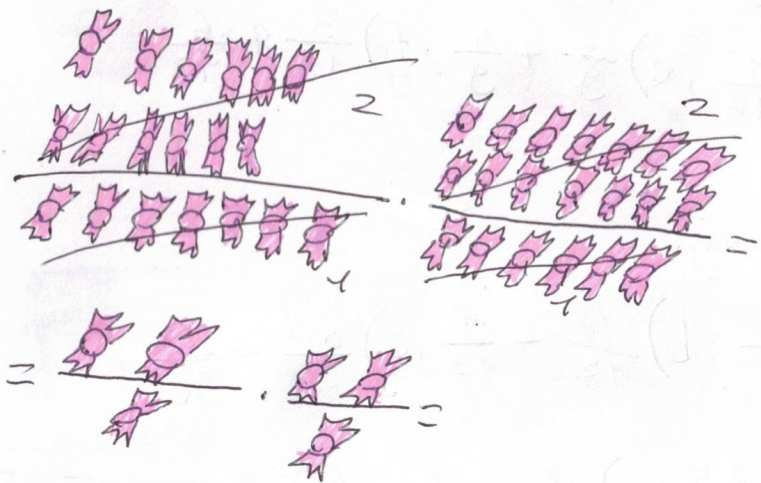
a) $\frac{6}{9} - \frac{3}{9}$, b) $\frac{16}{17} - \frac{1}{17}$, c) $\frac{30}{30} - \frac{28}{30}$,

d) $\frac{50}{50} - \frac{25}{50}$, e) $\frac{2}{13} - \frac{1}{13}$, f) $\frac{9}{14} - \frac{2}{14}$.

Odgovori (1, 2 zad.):

1. a) $\frac{9}{10}$, b) $\frac{14}{7} = 2$, c) $\frac{12}{12} = 1$,
d) $\frac{8^1}{16_2} = \frac{1}{2}$, e) $\frac{6^2}{9_3} = \frac{2}{3}$, f) $\frac{9^1}{18_2} = \frac{1}{2}$.

2. a) $\frac{8^1}{9_3} = \frac{1}{3}$, b) $\frac{15}{17}$, c) $\frac{2^1}{30_{15}} = \frac{1}{15}$,
d) $\frac{25^5}{50_{10}} = \frac{8^1}{10_2} = \frac{1}{2}$, e) $\frac{1}{13}$, f) $\frac{7^1}{14_2} = \frac{1}{2}$.



Pretvori bombone u brojere i pogledaj kakav je rezultat.

$$\frac{12^2}{7_1 \cdot 4_1} = \frac{2}{1} \cdot \frac{2}{1} = 4$$

3. Koliko je:

a) $\frac{12}{7} \cdot \frac{14}{6}$, b) $\frac{8}{18} \cdot \frac{18}{64}$, c) $\frac{7}{32} \cdot \frac{16}{21}$,

d) $\frac{12}{3} \cdot \frac{6}{36}$, e) $4 \cdot \frac{6}{12}$, f) $\frac{1}{3} \cdot \frac{6}{4}$.

4. Koliko je:

a) $\frac{12}{8} : \frac{2}{4}$, b) $\frac{2}{3} : \frac{4}{21}$, c) $6 : \frac{2}{3}$,

d) $2\frac{2}{3} : \frac{8}{6}$, e) $\frac{4}{6} : \frac{2}{9}$, f) $4 : \frac{1}{4}$.

Odgovori (3, 4 zad.):

3. a) $\frac{12^2}{7_1 \cdot 6_1} = \frac{2}{1} \cdot \frac{2}{1} = \frac{4}{1} = 4$,

b) $\frac{8^1}{18_1 \cdot 64_8} = \frac{1}{1} \cdot \frac{1}{8} = \frac{1}{8}$, c) $\frac{7^1}{32_2 \cdot 24_3} = \frac{1}{2} \cdot \frac{1}{3} = \frac{1}{6}$,

d) $\frac{12^1}{3_1 \cdot 36_3} = \frac{1}{1} \cdot \frac{2}{3} = \frac{2}{3}$, e) $\frac{4^1}{1} \cdot \frac{6}{12_3} = \frac{1}{1} \cdot \frac{6}{3} = \frac{6}{3} = 2$,

f) $\frac{1}{8_1} \cdot \frac{6^2}{4} = \frac{1}{1} \cdot \frac{2}{4} = \frac{2_1}{4_2} = \frac{1}{2}$

4. a) $\frac{12^2}{8_2 \cdot 2_1} = \frac{6}{2} \cdot \frac{1}{1} = \frac{6}{2} = 3$, b) $\frac{2^1}{3_1} \cdot \frac{2^7}{4_2} = \frac{1}{1} \cdot \frac{7}{2} = \frac{7}{2} = 3\frac{1}{2}$

c) $\frac{6^3}{1} \cdot \frac{3}{2_1} = \frac{3}{1} \cdot \frac{3}{1} = \frac{9}{1} = 9$, d) $\frac{8^1}{3_1} \cdot \frac{6^2}{8_1} = \frac{1}{1} \cdot \frac{2}{1} = \frac{2}{1} = 2$

e) $\frac{4^2}{6_2} \cdot \frac{8^3}{2_1} = \frac{2}{2} \cdot \frac{3}{1} = \frac{6}{2} = 3$, f) $\frac{4}{1} \cdot \frac{4}{1} = \frac{16}{1} = 16$

Probaj napisati svoj zadatak:

5. Izračunaj:

$$a) (3\frac{1}{2} - 1\frac{1}{3} : \frac{5}{3}) \cdot 1\frac{2}{3} + \frac{3}{8}$$

$$b) (\frac{13}{16} + \frac{6}{4}) \cdot 1\frac{2}{6}$$

$$c) (\frac{8}{12} + \frac{4}{24}) : (\frac{6}{12} - \frac{2}{12})$$

$$d) (6\frac{1}{3} + \frac{8}{12}) \cdot \frac{4}{12}$$

Odgovori (5 zad.):

$$5. a) (3\frac{1}{2} - 1\frac{1}{3} : \frac{5}{3}) \cdot 1\frac{2}{3} + \frac{3}{8} =$$

$$= (\frac{7}{2} - \frac{4}{3} : \frac{5}{3}) \cdot \frac{5}{3} + \frac{3}{8} =$$

$$= (\frac{7}{2} - \frac{4}{3} \cdot \frac{3}{5}) \cdot \frac{40}{24} + \frac{9}{24} =$$

$$= (\frac{7}{2} - \frac{4}{1} \cdot \frac{1}{5}) \cdot \frac{49}{24} =$$

$$= (\frac{7}{2} - \frac{4}{5}) \cdot \frac{49}{24} =$$

$$= (\frac{35}{10} - \frac{8}{10}) \cdot \frac{49}{24} =$$

$$= \frac{27}{10} \cdot \frac{49}{24} = \frac{1323}{240} = 5\frac{423}{240} = 5\frac{141}{80}$$

$$b) (\frac{13}{16} + \frac{6}{4}) \cdot 1\frac{2}{6} =$$

$$= (\frac{13}{16} + \frac{24}{16}) \cdot \frac{8}{6} =$$

$$= \frac{37}{16} \cdot \frac{8}{6} =$$

$$= \frac{37}{2} \cdot \frac{1}{6} = \frac{37}{12} = 3\frac{1}{12}$$



$$c) \left(\frac{8}{12} + \frac{4}{24} \right) : \left(\frac{6}{12} - \frac{2}{12} \right) =$$

$$= \left(\frac{16}{24} + \frac{4}{24} \right) : \frac{4}{12} =$$

$$= \frac{20}{24} : \frac{4}{12} =$$

$$= \frac{20^5}{24_2} \cdot \frac{12_1}{4_1} =$$

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

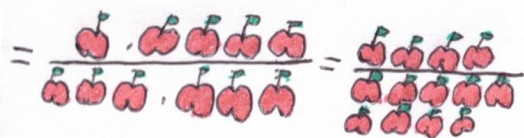
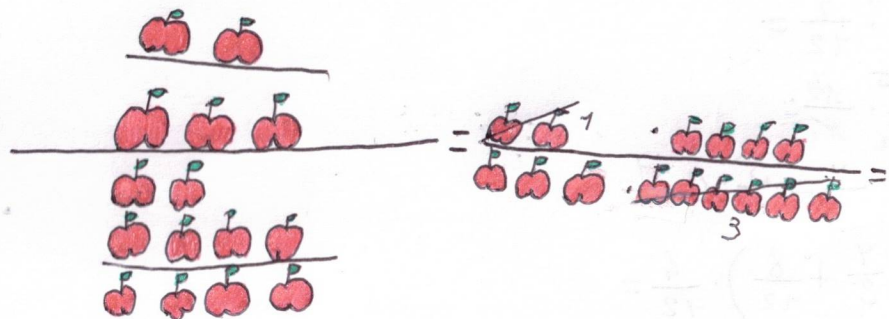
$$d) \left(6 \frac{4}{3} + \frac{8}{12} \right) \cdot \frac{4}{12} =$$

$$= \left(\frac{19}{3} + \frac{8}{12} \right) \cdot \frac{4}{12} =$$

$$= \left(\frac{76}{12} + \frac{8}{12} \right) \cdot \frac{4}{12} =$$

$$= \frac{84_7}{12_3} \cdot \frac{4_1}{12_1} =$$

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



Pretvori jabuke u brojeve, i pogledaj kakav je rezultat.

$$\frac{\frac{2}{3}}{\frac{6}{4}} = \frac{2 \cdot 4}{3 \cdot 6} = \frac{1 \cdot 4}{3 \cdot 3} = \frac{4}{9}$$

6. Izračunaj:

a) $\frac{\frac{6}{8}}{\frac{5}{6}}$, b) $\frac{\frac{6}{2}}{\frac{3}{6}}$, c) $\frac{\frac{9}{4}}{\frac{7}{2}}$, d) $\frac{\frac{7}{9}}{\frac{6}{6}}$, e) $\frac{\frac{8}{7}}{\frac{2}{3}}$.

7. Izračunaj:

a) $2\frac{1}{3} + 6\frac{2}{3}$, b) $1\frac{4}{5} + 3\frac{1}{2} + 1\frac{1}{2}$, c) $4\frac{1}{3} + 2 + 1\frac{1}{2} + \frac{2}{6}$.

Odgovori (6, 7 zad.):

6. a) $\frac{18}{20} = \frac{9}{10}$, b) $\frac{6}{1} = 6$, c) $\frac{9}{14}$, d) $\frac{42}{9} = 4\frac{6^2}{9^2} = 4\frac{2}{3}$, e) $\frac{12}{7} = 1\frac{5}{7}$

7. a) $2\frac{1}{3} + 6\frac{2}{3} =$

$$= \frac{7}{3} + \frac{20}{3} =$$

$$= \frac{27}{3} =$$

$$= \frac{7}{1}$$

$$= \frac{27 \cdot 1}{3 \cdot 7} = \frac{27}{21} = 1\frac{6^2}{21^2} = 1\frac{2}{7}$$

c) $4\frac{1}{3} + 2 + 1\frac{1}{2} + \frac{2}{6} =$

$$= \frac{13}{3} + \frac{2}{1} + \frac{3}{2} + \frac{2}{6} =$$

$$= \frac{26}{6} + \frac{72}{6} + \frac{9}{6} + \frac{2}{6} =$$

$$= \frac{108}{6} =$$

$$= \frac{48}{3} = \frac{7 \cdot 2^4}{3 \cdot 7^1} = \frac{7 \cdot 1}{3 \cdot 1} = \frac{7}{3} = 2\frac{1}{3}$$

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

$$= \frac{9}{5} + \frac{7}{2} + \frac{3}{2} =$$

$$= \frac{18}{10} + \frac{35}{10} + \frac{15}{10} =$$

$$= \frac{68}{10} =$$

$$= \frac{68 \cdot 1}{10 \cdot 2} = \frac{17 \cdot 1}{10 \cdot 2} = \frac{17}{20}$$

8. Koliko je:

a) 20% od 600, b) 15% od 300

c) 50% od 450, d) 20% od 700.

9. Koliko je:

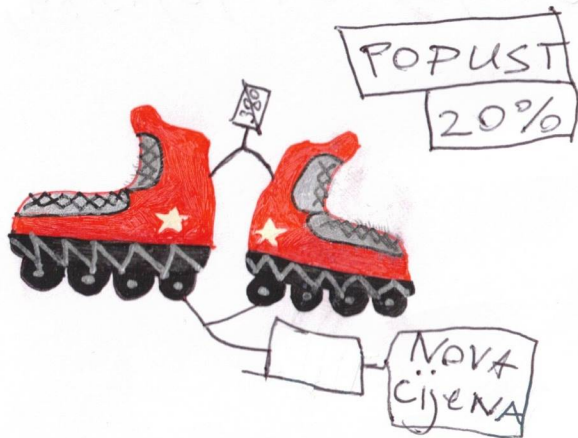
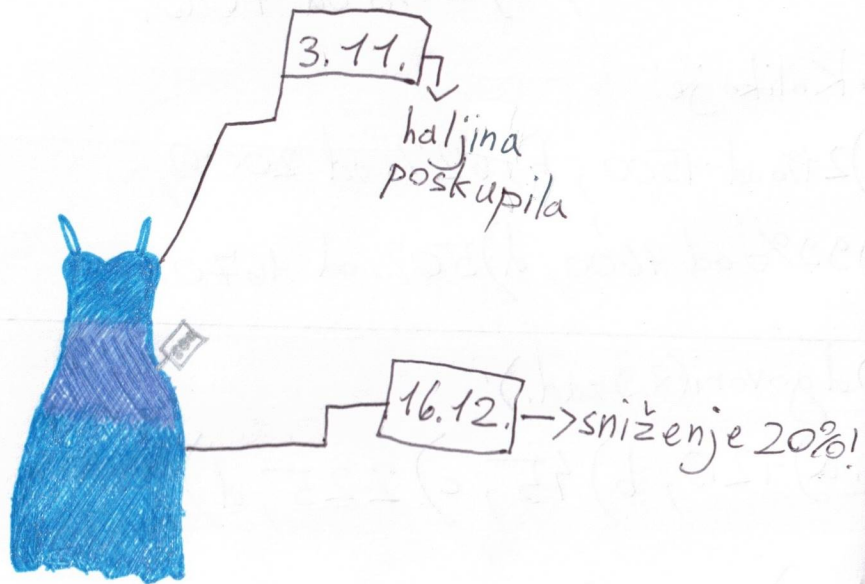
a) 21% od 1500, b) 62% od 2000,

c) 99% od 1600, d) 50% od 1670.

Odgovori (8, 9 zad.):

8. a) 120, b) 45, c) 225, d) 140.

9. a) 315, b) 1240, c) 1584, d) 835.



10. Cijena haljine je 800 kuna. Prvo je poskupila za 15%, a nakon je bila na popustu za 20%. Kolika je cijena haljine bila kad je poskupila, a kad je bila na popustu?

11. Karla hoće kupiti role od 380 kuna i ima 340. Role su na popustu od 20% posto. Koliko role na popustu koštaju? Može li ih Karla kupiti?

Odgovori (10, 11 zad.):

10. 800 kn

a) 15% od 800 = 920, b) 20% od 920 = 736

Kada je haljina poskupila bila je 920 kn, a kada je bila na popustu bila je 736 kn.

11. Role = 380 kn, Karla ima = 340, popust = 20%

Role su na popustu 304 kn i Karla ih može kupiti.