

3. PREVERJANJE ZNANJA iz matematike (B)

Ime in priimek: _____

Rešitve

Razred: 7.	Število točk: od 46
Datum: 20. 2. 2023	Število doseženih točk:

50 – 64,99% (zad 2), 65-79,99% (dob 3), 80 – 89,99% (pdb 4), 90 – 100% (odl 5)

1. Izračunaj! (8 točk)

a) $\frac{8}{9} - \frac{2}{9} = \frac{6}{9} = \frac{2}{3}$ (1t)

b) $\frac{1}{6} + \frac{5}{12} + \frac{7}{8} =$

$= \frac{4}{24} + \frac{10}{24} + \frac{21}{24} = \frac{35}{24} = 1\frac{11}{24}$ (1t)

c) $3\frac{1}{3} + 1\frac{1}{2} = 3\frac{2}{6} + 1\frac{3}{6} = 4\frac{5}{6}$ (1t)

d) $5 - 2\frac{2}{3} = 2\frac{1}{3}$ (1t)

$$\begin{array}{r} 9,784 \\ + 73,600 \\ \hline 83,384 \end{array}$$

e) $0,12 : \frac{3}{5} = \frac{12 \cdot 5 \cdot 4 \cdot 1 \cdot 1}{100 \cdot 3 \cdot 1 \cdot 20 \cdot 5} = \frac{1}{5}$ (1t)

f) $73,6 + 9,784 = 83,384$ (1t)

g) $3,5 \cdot 0,022 = 0,077$ (1t)

$$\begin{array}{r} 0,022 \cdot 3,5 \\ \hline 66 \\ 110 \\ \hline 0,0770 \end{array}$$

h) $1,8 : 0,02 = 90$ (1t)

$180 : 2$

2. Izračunaj vrednost izrazov: (4 točke)

a) $2\frac{4}{9} - (1\frac{1}{3} + \frac{1}{6}) =$

$= 2\frac{4}{9} - (1\frac{2}{6} + \frac{1}{6}) =$

$= 2\frac{4}{9} - 1\frac{3}{6} = 2\frac{8}{9} - 1\frac{9}{18} =$

b) $3,75 + (1\frac{1}{8} + (6\frac{1}{4} - 2\frac{3}{12}) - 0,12) =$

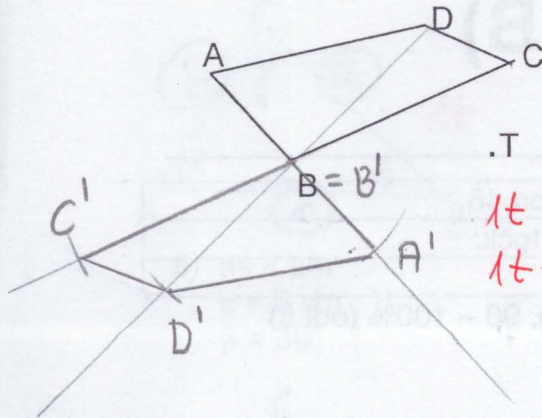
glej list

3. **Prezrcali in zapiši z matematičnimi znaki:** (6 točk)

a) štirikotnik ABCD čez točko B

Zapis:

$$\mathbb{Z}_B: ABCD \rightarrow A'B'C'D' \quad (1t)$$

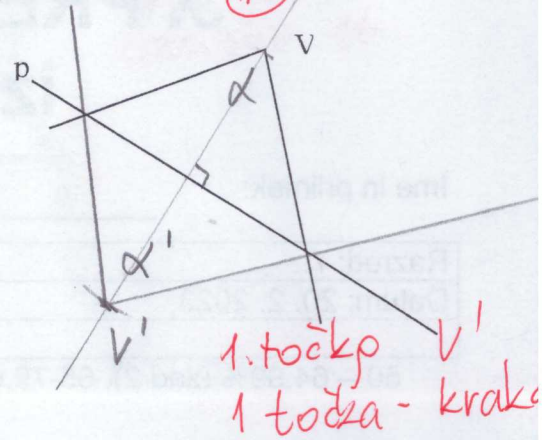


1t - SLIKA
1t - OZNAKA

b) kot čez premico p

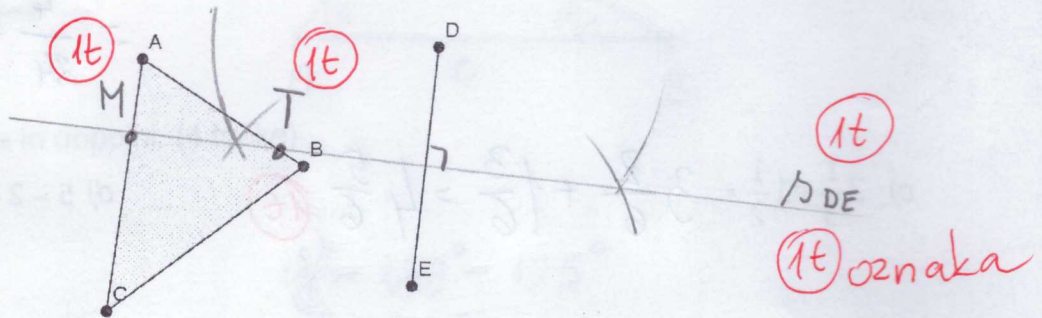
Zapis:

$$\mathbb{Z}_p: \sphericalangle V \rightarrow \sphericalangle V' \quad (1t)$$

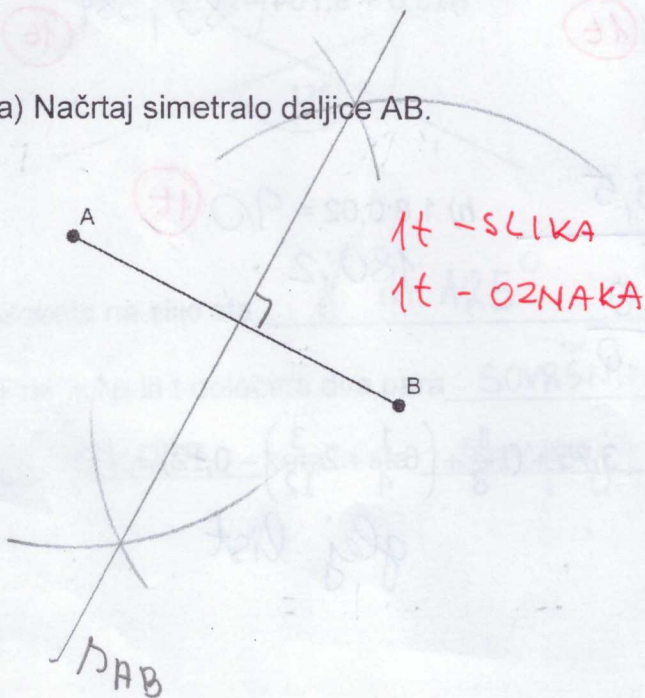


1. točka V'
1 točka - krak

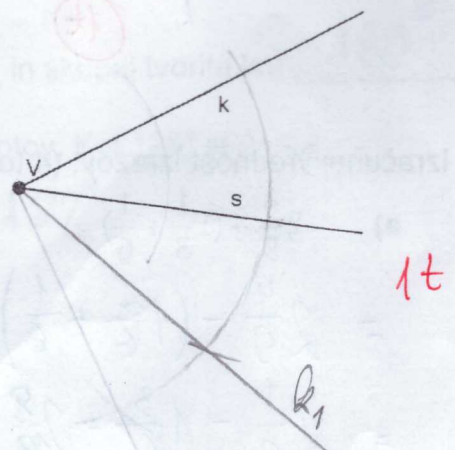
2. Na trikotnikovih stranicah **določi tiste točke**, ki so **enako oddaljene** od krajišč daljice DE. (4 točke)



5. a) Načrtaj simetralo daljice AB.



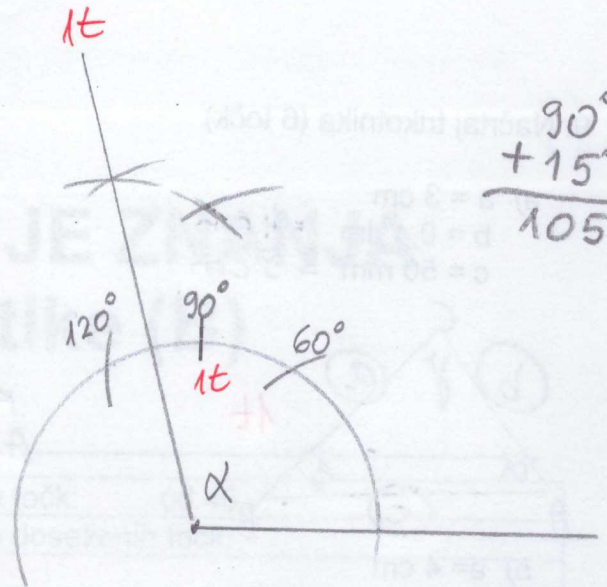
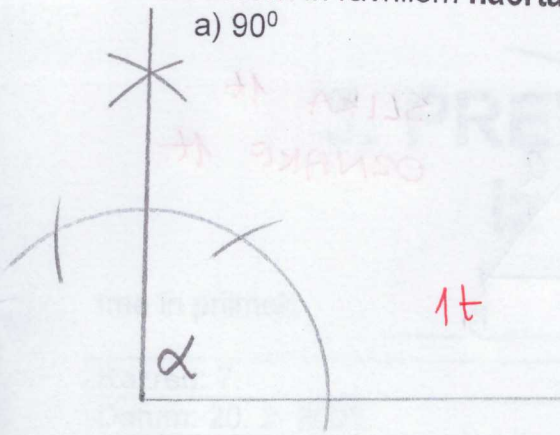
b) Na sliki je en krak kota in simetrala. Načrtaj drugi krak tega kota. (3 točke)



6. S šestilom in ravnilom načrtaj kota: (3 točke)

a) 90°

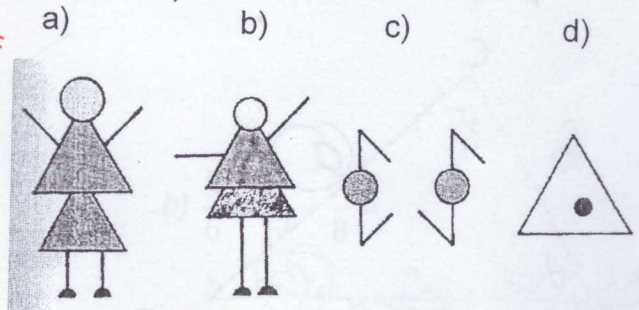
b) 105°



7. Katere figure so osno in katere središčno somerne? (2 točki)

a) Osno somerne figure: a, b, d

b) Središčno somerne figure: c



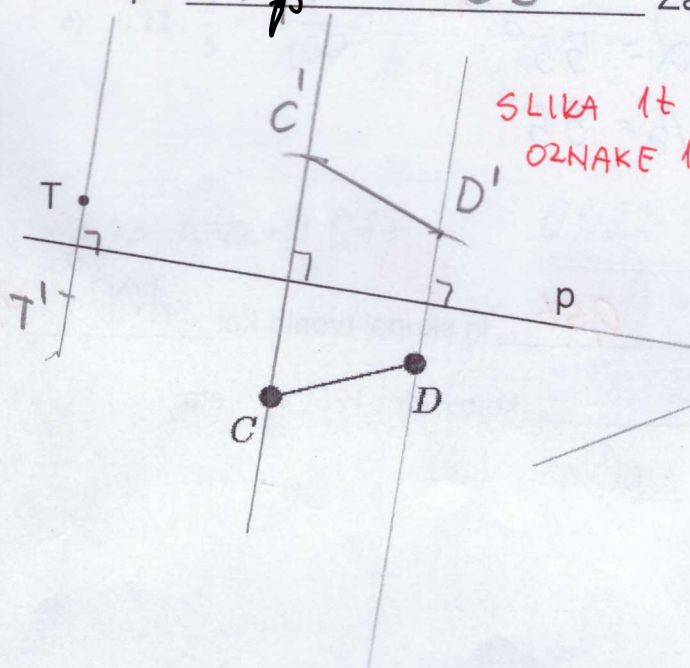
8. Prezrcali in zapiši z matematičnimi znaki: (6 točk)

a) točko T in daljico CD čez premico p

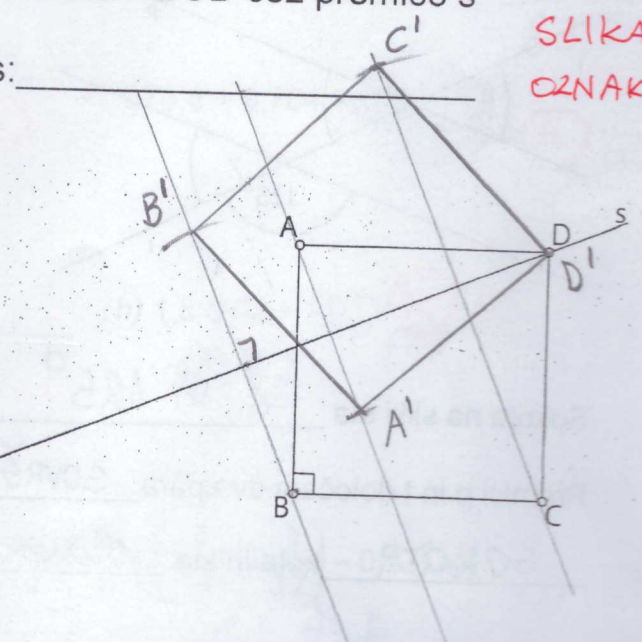
b) kvadrat ABCD čez premico s

Zapis: $Z_1: CD \rightarrow C'D'$

Zapis: _____



SLIKA 1t
OZNAKE 1t

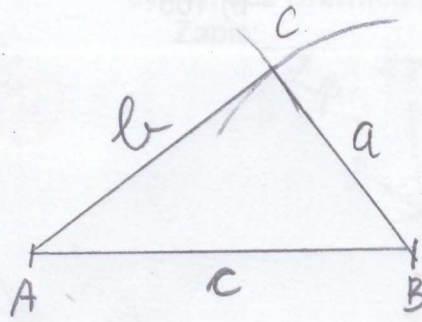
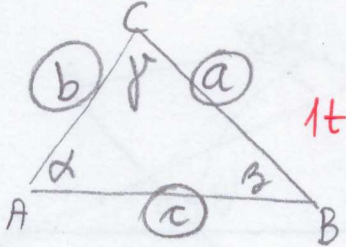


SLIKA 1t
OZNAKE 1t

$Z_2: ABCD \rightarrow A'B'C'D'$
1t

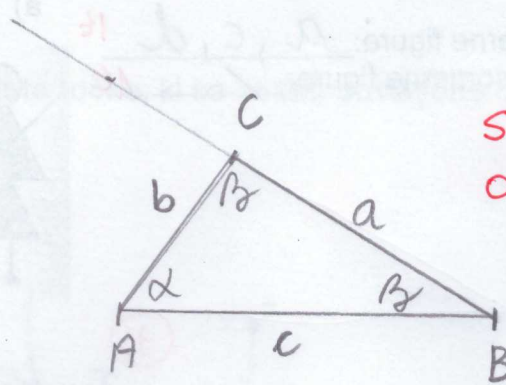
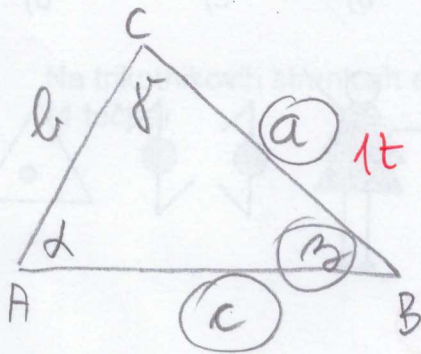
9. Načrtaj trikotnika (6 točk)

- a) $a = 3 \text{ cm}$
 $b = 0,4 \text{ dm} = 4 \text{ cm}$
 $c = 50 \text{ mm} = 5 \text{ cm}$



SLIKA 1t
 OZNAKE 1t

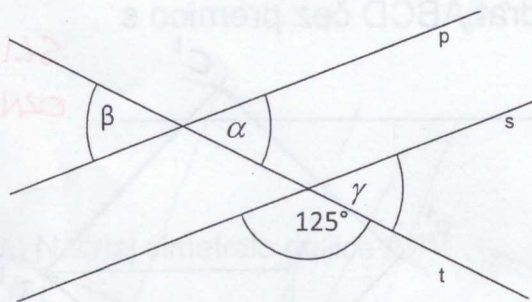
- b) $a = 4 \text{ cm}$
 $c = 5 \text{ cm}$
 $\beta = 30^\circ$



SLIKA 1t
 OZNAKE 1t

10. Izračunaj neznane kote in dopolni. (4 točke)

p || s



$\gamma = 180^\circ - 125^\circ$
 $\gamma = 55^\circ$
 $\alpha = 55^\circ$
 $\beta = 55^\circ$

1t

Sokota na sliki sta γ in 125° 0,5t in skupaj tvorita kot 180° 0,5t

Premici p in t določata dva para SOVRŠNIH kotov. Kot 125° in γ sta SOKOTA kota in sta skupaj velika 180° ,

SKUPINA

$$200 : 8 = 25$$

B a)

$$2\frac{4}{9} - \left(1\frac{1}{3} + \frac{1}{6}\right) =$$

$$= 2\frac{4}{9} - \left(1\frac{2}{6} + \frac{1}{6}\right) =$$

$$= 2\frac{4}{9} - 1\frac{3}{6} \text{ (It)}$$

$$= 2\frac{8}{18} - 1\frac{9}{18} =$$

$$= 1\frac{26}{18} - 1\frac{9}{18}$$

$$= \frac{17}{18} \text{ (It)}$$

b)

$$3,75 + \left(1\frac{1}{8} + \left(6\frac{1}{4} - 2\frac{3}{12}\right) - 9\frac{12}{100}\right)$$

$$= 3\frac{3}{4} + \left(1\frac{1}{8} + \left(6\frac{3}{12} - 2\frac{3}{12}\right) - \frac{12}{100}\right)$$

$$= 3\frac{3}{4} + \left(1\frac{1}{8} + 4\right) - \frac{12}{100} =$$

$$= 3\frac{3}{4} + 5\frac{1}{8} - \frac{12}{100} =$$

$$= 3\frac{150}{200} + 5\frac{25}{200} - \frac{24}{200} =$$

$$= 8\frac{175}{200} - \frac{24}{200} =$$

$$= 8\frac{151}{200} \text{ (It)} = 8,755$$

SKUPINA A

a) $9,2 - 4,2 \cdot 0,5 + 1,05 : 0,5 =$

$$= 9,2 - 2,1 \text{ (0,5)} + 2,1 \text{ (0,5)} =$$

$$= 7,1 + 2,1 =$$

$$= \underline{9,2} \text{ (It)}$$

$$\frac{4,2 \cdot 0,5}{2,10}$$

$$\frac{10,5 : 5 = 2,1}{= 5}$$

b) $12 - \left(3\frac{1}{8} - \left(4\frac{3}{4} - 2\frac{1}{3}\right)\right) =$

$$= 12 - \left(3\frac{1}{8} - \left(4\frac{9}{12} - 2\frac{4}{12}\right)\right) =$$

$$= 12 - \left(3\frac{1}{8} - 2\frac{5}{12} \text{ (0,5)}\right) =$$

$$= 12 - \left(3\frac{3}{24} - 2\frac{10}{24}\right) =$$

$$= 12 - \left(2\frac{27}{24} - 2\frac{10}{24}\right) = 12 - \frac{17}{24} = 11\frac{7}{24} \text{ (It)}$$