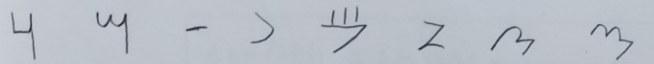


STA RO EGI PATSKA
MAT EMATIKA

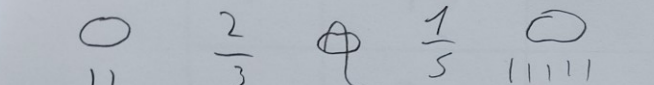
MARKO
VUČE MOVIĆ

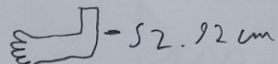
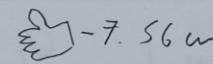
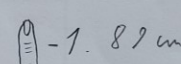
SADRŽAJ

1  1

1 4 4 - >  4

95 - 45 = $\begin{matrix} \text{nnnnn} \\ \text{nnnn} \end{matrix}$ $\begin{matrix} \text{lll} \\ \text{ll} \end{matrix}$ - $\begin{matrix} \text{nnnn} \\ \text{ll} \end{matrix}$ $\begin{matrix} \text{lll} \\ \text{ll} \end{matrix}$ 7

1  9

RAJJEVSKI LAKAT DLAN PAST 11
 - 52.92 cm  - 7.56 cm  - 1.89 cm

1 KAZ BROJEVA - HIEROGLIFI 1 1








1 KAZ BROJEVA - HIERATSKI ZAPIS 4 4

1 KO SU RAČUNALI STARI EGIPĆANI 7

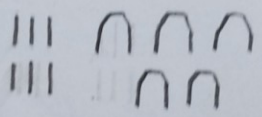
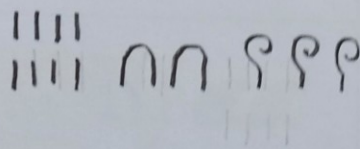
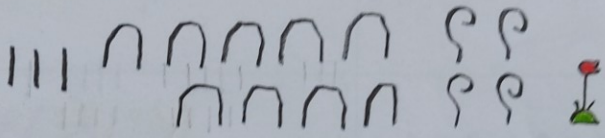
1 GIPATSKI KAZLOMCI 9

1 RALJEVSKI LAKAT 11

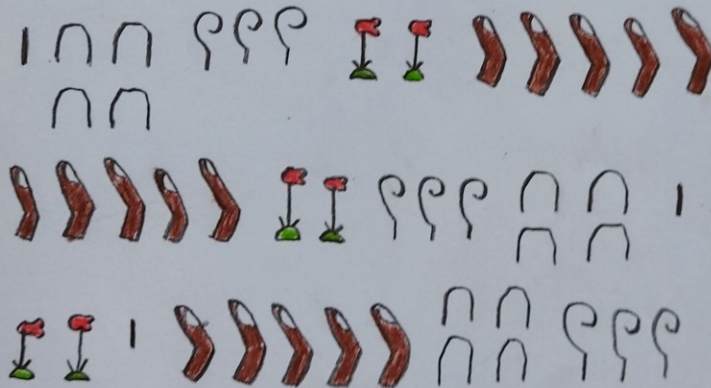
EGIPATSKI BROJEVNI SUSTAV

ARAPSKI BROJ	SIMBOL-HIJEROGLIF	ZNAČENJE
1		ŠTAPIĆ
10		POTKOVA
100		UŽE
1000		LOTOSOV CVIJET
10 000		PRST
100 000		GUJTERICA PUNOGLAVAC
1 000 000		BOŽANSTVO, ČOVJEK KOJI DRŽI RUKE
		PREMA NEBU

1. Ispuni tablicu tako da zadane brojeve napišeš pomoću hijeroglifa.


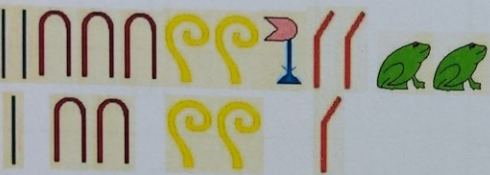

BROJ	PRIKAZ BROJA - HIJEROGLIFI
56	
328	
1 493	

2. Broj 52 341 napiši pomoću hijeroglifa na 3 različita načina. Zašto to možeš?



Zato što se simboli zbrajaju.

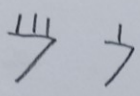
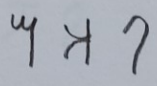
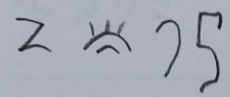
3. Otkrij i zapiši koji su brojevi u tablici zapisani pomoću hijeroglifa.

PRIKAZ BROJA - HIJEROGLIFI	BROJ
	36
	237453
	2013003

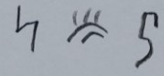
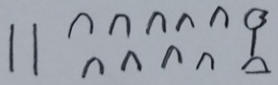
HIJERATSKO PISMO

ARAPSKI BROJ	SIMBOL	ARAPSKI BROJ	SIMBOL
1	۱	20	۲۰
2	۲	30	۳۰
3	۳	40	۴۰
4	۴	50	۵۰
5	۵	60	۶۰
6	۶	70	۷۰
7	۷	80	۸۰
8	۸	90	۹۰
9	۹	100	۱۰۰
10	۱۰	1000	۱۰۰۰

1. Ispuni tablicu.

BROJ	PRIKAZ BROJA – HIJERATSKI ZAPIS
56	
173	
1 197	

2. Broj 1 092 napiši pomoću hijeroglifa i hijeratskog pisma.

3. Otkrij i zapiši koji su brojevi u tablici zapisani pomoću hijeratskog pisma.

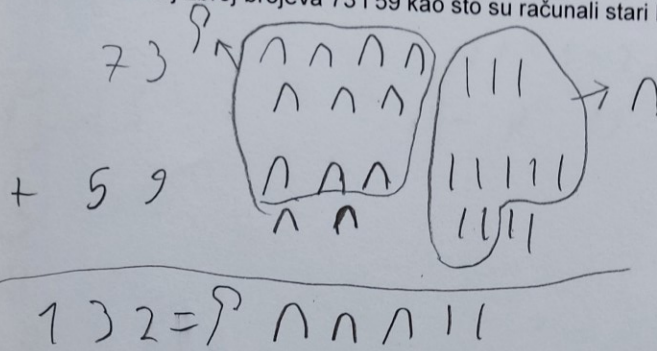
PRIKAZ BROJA – HIJERATSKI ZAPIS	BROJ
4 =	42
3x7	129
3y75	7168

(1.)

Kako su računali stari Egipćani?

1. Izračunaj zbroj brojeva 73 i 59 kao što su računali stari Egipćani.

73 + 59



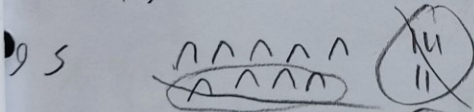
132 = 100 + 30 + 2

1	
10	∩
100	⤵
1000	⤴
10 000	⤶
100 000	⤷
1000 000	⤸

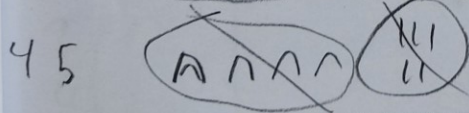
2. Izračunaj razliku brojeva 95 i 49 kao što su računali stari Egipćani.

$$95 - 49 = 95 - 45 - 4 = 50 - 4 = 46$$

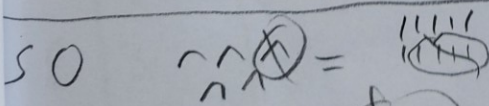
95



45

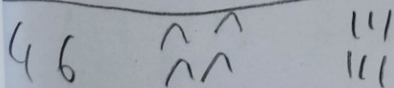


50



4

46



3. Pomnoži brojeve 19 i 25 na način kako su to činili stari Egipćani. Rezultat provjeri načinom na koji mi množimo brojeve.

$$19 \cdot 25 = ?$$

1	25
2	50
4	100
8	200
16	400

33 800 jer je 32 veći od 19

$$19 = 1 + 2 + 16$$

$$\text{pa je } 19 \cdot 25 = 25 + 50$$

$$+ 400$$

$$= 475$$

$$\frac{19 \cdot 25}{38}$$

$$+ 95$$

$$\frac{475}{19}$$

4. Podijeli broj 102 brojem 6 na način kako su to činili stari Egipćani. Rezultat provjeri načinom na koji mi dijelimo brojeve.

$$102 : 6 = ?$$

1	6
2	12
4	24
8	48
16	96

32 102 pa je 102 > 102

$$102 = 96 + 6$$

$$102 : 6 = 96 + 6 = 17$$

$$102 : 6 = 17$$

$$\frac{42}{42}$$



Egipatski razlomci

1. Pomoću hijeroglifa prikaži sljedeće razlomke:

$\frac{1}{2}$	○
$\frac{2}{3}$	⊕
$\frac{1}{5}$	○
$\frac{1}{30}$	○ ∧∧∧
$\frac{1}{23}$	○ ∧∧
$\frac{1}{227}$	○ Ⓟ Ⓟ Ⓟ ∧∧

2. Razlomak $\frac{4}{5}$ prikaži kao egipatski razlomak.

$$\frac{4}{5} = \frac{1}{2} + \frac{1}{5} + \frac{1}{10}$$

$$\frac{1}{2} \leftarrow \frac{5}{5} = \left(2 + \frac{1}{2} \right)$$

$$\frac{1}{4} \leftarrow 1 + \frac{1}{4}$$

$$\frac{1}{5} \leftarrow (1)$$

$$\frac{1}{10} \leftarrow \left(\frac{1}{2} \right)$$

$$4 = 2 + \frac{1}{2} + 1 + \frac{1}{2}$$

PROVERIMO:



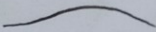



$$\frac{1}{2} + \frac{1}{5} + \frac{1}{10} =$$

$$\frac{5}{10} + \frac{2}{10} + \frac{1}{10} = \frac{8}{10} = \frac{4}{5}$$

(9)

HORUSOVO OKO

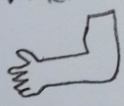




	$\frac{1}{2}$	MIRIS
	$\frac{1}{4}$	VID
	$\frac{1}{8}$	MISAŮ
	$\frac{1}{16}$	SLUH
	$\frac{1}{32}$	OKUS
	$\frac{1}{64}$	DODIK

$$\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} + \frac{1}{64} = \frac{63}{64}$$

Kraljevski lakat

1. Ispuni tablicu.

Staroegipatske mjere za duljinu	Približna vrijednost
KRALJEVSKI LAKAT 	52.92 cm
DLAN 	7.56 cm
PRST 	1.89 cm

1 KRALJEVSKI LAKAT = 7 DLANOVA
28 PRSTIJA



2. Izmjeri svoju visinu pomoću primjerka (replike) Kraljevskog lakta koji smo izradili na radionici i zapiši ju.

Visok/a sam 157 cm.

Visok/a sam 3  0  0 