

Marius Căldăraru

Ionel Cordovan

Gheorghe Sarău

MATEMĂTIKA

PUSTIK VAŠ I TRINTO KLÀSA



MATEMATICĂ

MANUAL PENTRU CLASA A III -A

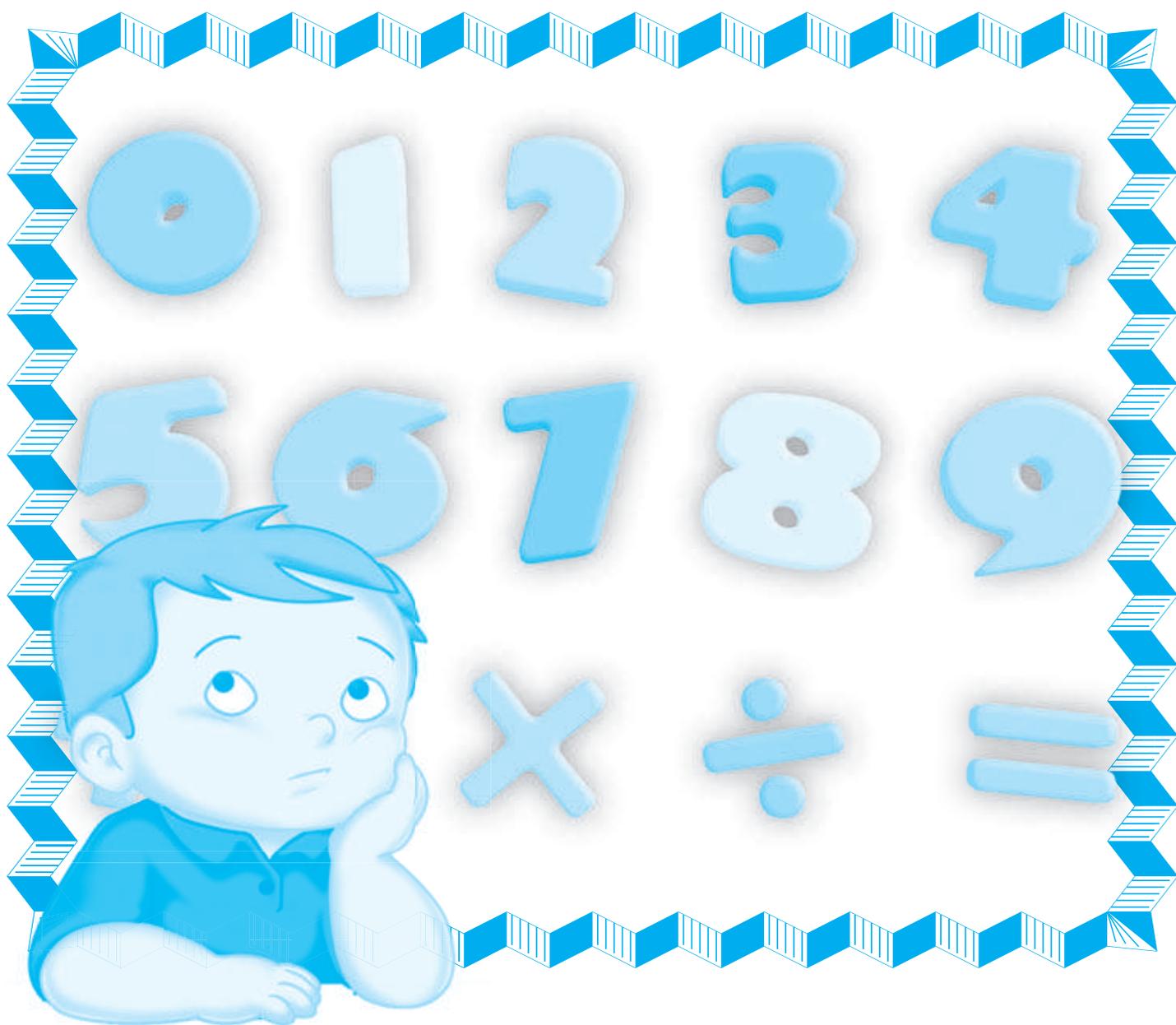


MINISTERUL
EDUCAȚIEI
NAȚIONALE

unicef 
unite for children

Matemătika – pustik vaš i trinto klàsa

Matematică – manual pentru clasa a III -a



Manualul a apărut, ca material școlar auxiliar, în cadrul parteneriatului dintre Ministerul Educației Naționale și Reprezentanța UNICEF în România. Manualul respectă obiectivele, cerințele și conținuturile din programa școlară de clasa a III-a.

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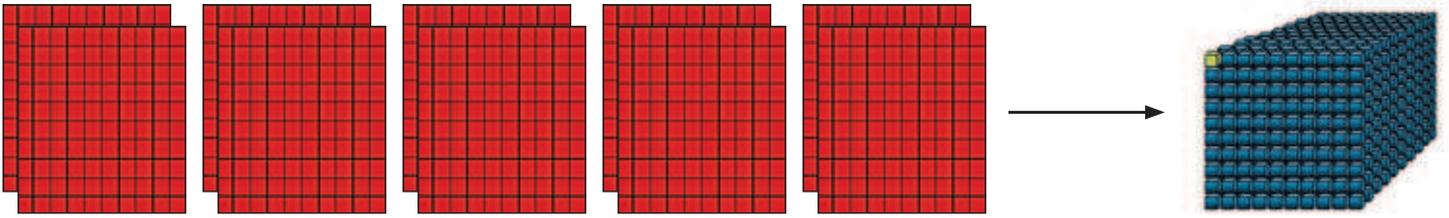
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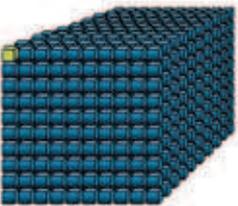
I. E NATURALO GINA KAΘAR O K-I 1000

1. E ginenqo formisaripen, xramosaripen thaj drabaripen Te palemdikhas!



deś śela keren → jekh mìa.

Xramosarel pes 1000 thaj drabarel pes jekh mìa



jekh mìa
10 śela
100 deśa
1000 jekhimata



jekh śel
10 deśa
100 jekhimata



jekh deś
10 jekhimata



jekh jekhipen

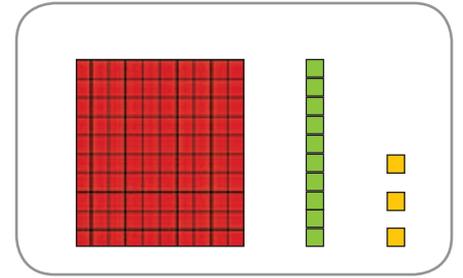
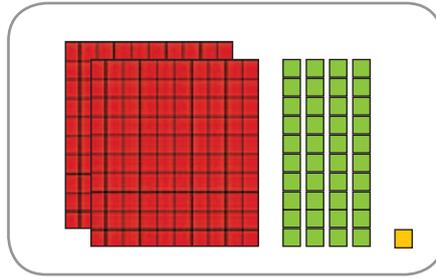
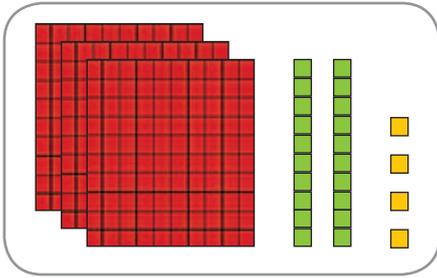


Inkeren godăθe!

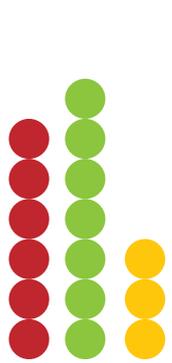
- E cifre save ađutin te xramosaras e gina si: 0, 1, 2, 3, 4, 5, 6, 7, 8,9.
- Kana e jekhimatenqi cifra jekhe naturalone ginesqi si 1, 3, 5, 7, 9, atunc **o gin si bizutesqo**.
- Kana e jekhimatenqi cifra jekhe naturalone ginesqi si 0, 2, 4, 6, 8, atunc **o gin si zuteća**.
- E gina save thavden jekh palal averesθe anθ-e naturalone ginenqo ŝiro si **konekutivo gina**.
Eksemplo: 1, 2, 3, 100, 101, 543, 544,1000.
- O gin arakhlo anglal aver gin anavărel pes **anglogin**, haj o gin savo si arakhlo palal lesθe si anavărdο **avutno gin**. *Eksemplo:* 345, 346, 347.
- o 345 si o anglogin e ginesqo 346;
- o 347 si o avutno gin e ginesqo 346.
- E ginenqo ordonisaripen kaθar o maj tikno gin ka-o maj baro gin anavărel pes **barărikani ordina**.
Eksemplo: 243, 244, 324, 356, 654, 672.
- E ginenqo ordonisaripen kaθar o maj baro gin ka-o maj tikno gin, anavărel pes **tiknederikani ordina**.
Eksemplo: 672, 654, 356, 324, 244, 243.

Klasaqe bută!

1. Xramosaren e gina anθ-e štartorre. Phenen sode śela, sode deśa thaj sode jekhimata si anθ-e reprezentisarde gina!



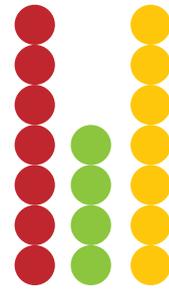
2. Dikhen e ginenqo ćitrārdo reprezentisaripen palal svāko ginavipen!



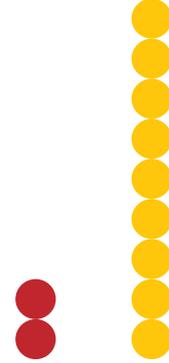
| | | |
|---|---|---|
| 6 | 7 | 3 |
| Ś | D | J |



| | | |
|---|---|---|
| 3 | 4 | 2 |
| Ś | D | J |



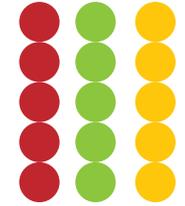
| | | |
|---|---|---|
| 7 | 4 | 8 |
| Ś | D | J |



| | | |
|---|---|---|
| 2 | 0 | 9 |
| Ś | D | J |



| | | |
|---|---|---|
| 4 | 8 | 6 |
| Ś | D | J |



| | | |
|---|---|---|
| 5 | 5 | 5 |
| Ś | D | J |

- Drabaren e reprezentisarde gina!
- Xramosaren e dine gine cifrença, palal kodoja grafemença!
- Phenen so reprezentisarel svāko cifra dikhindoj o than anθ-o savo aćhel!

3. Xramosaren savorre gina kerde anθar trin vever cifre save śaj te formisaren len e avutne ginença:
 a. 3; 4; 8; b. 9; 5; 7; c. 6; 5; 2; d. 7; 1; 8.

4. Dikhen e ginenqe śirurā, arakhen i rēgula thaj maj xramosaren inkā trin gina svakone śirosθe.
 a. 464; 466; 468; ...; b. 103; 106; 109; ...; c. 527; 524; 521; ...;
 d. 555; 560; 565; ...; e. 654; 664; 674; ...; f. 345; 335; 325;

5. Xramosaren jekh gin kerdo anθar trin vever cifre, zanindoj ke:
 • E trin cifre si zuteça;
 • E trine cifrenqi sūma si 8.

6. O Andrēj trebalas te zal k-i diz te bikinel rroja, e savenqo gin si maśkar 500 thaj 550. Arakhen savo si e rrojenqo gin, zanindoj ke:
 • E cifrenqi sūma kaθar e deśa thaj e jekhimata si gina zuteça;
 • E deśenqi cifra si maj bari sar e jekhimatenqi cifra.

2. I komparàcia thaj o ordonisaripen e naturalone ginenqo kaθar 0 k-i 1000

Dikhen e cìtre thaj anen tumenqe godãθe e règele palal save kerel pes e ginenqi komparàcia!

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---------------------------|---|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|
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| <table border="1" style="display: inline-table;"><tr><td>7</td><td>2</td><td>3</td></tr><tr><td>Š</td><td>D</td><td>J</td></tr></table> | 7 | 2 | 3 | Š | D | J | <table border="1" style="display: inline-table;"><tr><td>5</td><td>4</td><td>6</td></tr><tr><td>Š</td><td>D</td><td>J</td></tr></table> | 5 | 4 | 6 | Š | D | J | <table border="1" style="display: inline-table;"><tr><td>2</td><td>4</td><td>8</td></tr><tr><td>Š</td><td>D</td><td>J</td></tr></table> | 2 | 4 | 8 | Š | D | J | <table border="1" style="display: inline-table;"><tr><td>2</td><td>3</td><td>9</td></tr><tr><td>Š</td><td>D</td><td>J</td></tr></table> | 2 | 3 | 9 | Š | D | J | <table border="1" style="display: inline-table;"><tr><td>5</td><td>2</td><td>5</td></tr><tr><td>Š</td><td>D</td><td>J</td></tr></table> <small>5 šela = 2 deša</small> | 5 | 2 | 5 | Š | D | J | <table border="1" style="display: inline-table;"><tr><td>5</td><td>2</td><td>7</td></tr><tr><td>Š</td><td>D</td><td>J</td></tr></table> | 5 | 2 | 7 | Š | D | J |
| 7 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Š | D | J | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 4 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Š | D | J | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Š | D | J | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 3 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Š | D | J | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 2 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Š | D | J | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 2 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Š | D | J | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 šela > 5 šela | | 2 šela = 2 šela | | 5 jekhimata < 7 jekhimata | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| dec: 723 > 546 | | 4 deša > 3 deša | | dec: 525 < 527 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Inkeren godãθe!

Anθar duj gina kerde anθar šela, deša thaj jekhimata si maj baro:

- o gin savo si les e šelaqi cifra maj bari;
- o gin savo si les e dešenqi cifra maj bari, kana e šelenqi cifra si barabar;
- o gin savo si les e jekhimatenqi cifra maj bari, kana e šelenqe thaj e dešenqe cifre si barabar.

Eksèmplo: 785 > 599

Eksèmplo: 634 > 627

Eksèmplo: 554 > 552

Anθar duj naturàlo gina, kaj si len verver cifrenqo gin, si maj baro o gin kaj si les maj but cifre.

Eksèmplo: 424 > 56



Klasaqe butã!

1. Keren e ginenqi komparàcia anθar svãko zuto thaj xramosaren o trebutno sèmno (<; =; >)!

- a. 777 thaj 777 b. 34 thaj 543 c. 554 thaj 555
d. 820 thaj 698 e. 674 thaj 832 f. 678 thaj 87

2. Thon e trebutne cifre vaš save e relàcie te aven cácel!

| | | | | | | |
|---|---|---|---|---|---|---|
| * | 6 | 7 | > | 8 | 5 | 7 |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | 5 | 9 | < | 4 | 5 | * |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | * | * | = | * | 4 | 8 |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 7 | * | 7 | > | * | * | 6 |
|---|---|---|---|---|---|---|

3. Xramosaren anθ-i tiknederikani òrdina e gina: 569; 784; 56; 785; 324; 479!

4. Xramosaren anθ-i barãrikani òrdina e gina: 908; 763; 347; 109; 470; 55!

Eksèmplo: 567 < 568 > 569
 anglogin **avutno gin**

5. Xramosaren o anglogin thaj o avutno gin vaš svãko anθar e gina:

203; 567; 786; 453.

6. Pheren o avutno tabèlo!

| | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| anglogin | | 789 | | | 876 | | | 567 | |
| gin | 268 | | | 646 | | | 444 | | |
| avutno gin | | | 423 | | | 201 | | | 999 |

7. O Ionèl godísarel pes k-jekh gin maj baro sar o 550 thaj maj tikno sar 600, savesqe cìfre si konsekutivo. K-o savo gin godísarel pes o Ionèl?

8. Xramosaren o maj baro thaj o maj tikno naturàlo gin kerdo anθar trin cìfre:

- a. sajekh b. konsekutivo c. verver

9. Alosaren anθar e dine gina kodola save keren çaçe e telutne relàcie:

345; 434; 568; 454 675; 453; 525; 984

- a. $421 < \square < 471$ b. $572 > \square > 402$

10. O telutno tabèlo sikavel e angrustnànqo gin savo sas kerdo jekhe ruputnikane komunitetaθar. Anθ-o svàko çhon sas xramosardo e angrustnànqo gin.

| Çhon | Jan. | Febr. | Trinto naj | Štarto naj | Maj | Jùnio | Jùlio | Àgus-to | Sept. | Okt. | Nov. | Dec. |
|--------------------|------|-------|------------|------------|-----|-------|-------|---------|-------|------|------|------|
| e angrustnànqo gin | 234 | 432 | 567 | 347 | 654 | 709 | 341 | 543 | 309 | 145 | 202 | 389 |

a. Save si e anglutne trin çhona anθ-e save sas kerde e maj but angrustnà?

b. Save si e palutne trin çhona anθ-e save sas kerde e maj cìra angrustnà?



Keren butĩ khethanes!

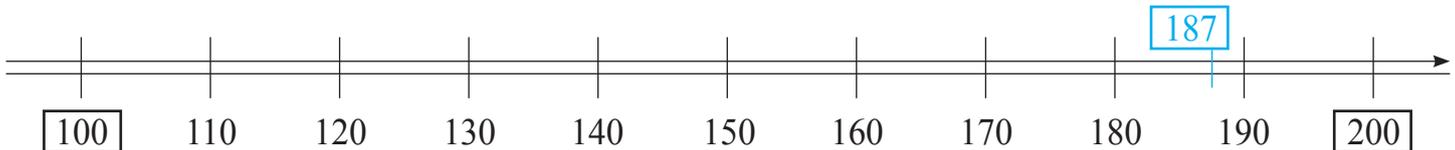
Arakhen “i kidlin” thaj pheren e trebutne ginença!

| | | | | | | | | |
|-----|-----|-----|-----|-----|---|-----|---|-----|
| 100 | * | 300 | * | 500 | * | * | * | 900 |
| 150 | 250 | * | 450 | * | * | 750 | * | * |

3. E naturalone ginenqo rotalisaripen kerdo anθar śela, deša thaj jekhimata

K-jekh sastrilin si kutie anθ-e save si 100 vaj 200 karfina. Kana jekhe sastràres trebal lesqe 187 karfina, savi kutia kinela vov?

• O rotalisaripen ka-e śela

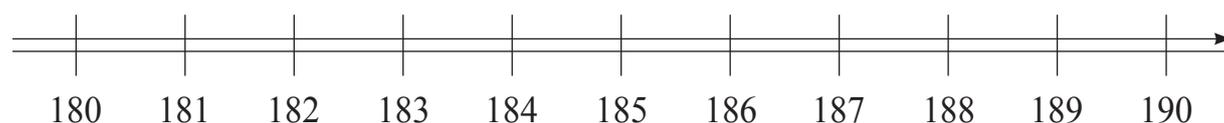


O gin 187 si maj paše karing o 200 sar karing 100, dec o gin 187 **rotalisarel pes** ka-o gin 200.

• O rotalisaripen ka-e deša

Si amen kutie 180-e thaj 190-e karfinença. Rotalisarav o gin ka-e deša kaj te zanav sode karfina kinav.

a



b) $317 - 137 = ?$ $\begin{array}{|c|c|c|} \hline 3 & 1 & 7 \\ \hline \end{array} - \begin{array}{|c|c|c|} \hline 1 & 3 & 7 \\ \hline \end{array} = 317 - 117 - 20 =$

$\begin{array}{l} 117+20 \\ 200-20 \\ 180 \end{array}$



| | | | | | |
|---|---|---|---|--|--|
| | | | | | |
| | . | | | | |
| 3 | 1 | 7 | - | | |
| 1 | 3 | 7 | | | |
| 1 | 8 | 0 | | | |

← **TIKNEDERIPNASQO GIN**
 ← **TIKNEDERNO**
 ← **DIFERËNCA**

- ① Tiknederen pen e jekhimata: $7 - 7 = 0$
- ② Tiknederen pen e deša. Dikhel pes ke $1 < 3$, deç $1 - 3$ na šaj te ginavel pes. Liel pes kašar e šela jekh šel, savi kerdöl 10 deša thaj akana si $11 - 3 = 8$
- ③ Maj ačhile 2 šela. Tiknederen pen e šela: $2 - 1 = 1$

Klasaqe bută!

1. Ginaven, thovindoj e gina jekh telal kolaver!
- a) $257 + 471$ b) $575 + 342$ c) $735 + 216$ d) $236 + 673$
 $654 - 328$ $564 - 238$ $780 - 429$ $436 - 146$

2. Arakhen:
- a) e ginenqi sùma: 175 thaj 563; 558 thaj 371; 536 thaj 182.
 b) e ginenqi diferënca: 426 thaj 142; 435 thaj 275; 746 thaj 382.
 c) i diferënca, kana e tiknederipnasqo gin si 524, haj o tiknederno si 348.

3. Ginaven e sùme, thovindoj trebutnes e tèrmenură!
- a) $300 + 175 + 100$ b) $450 + 50 + 256$ c) $220 + 70 + 530$

4. O tabëlo reprezentisarel e luludănqo gin save sas votanărde thaj grizisarde e luludărenšar.
- a) Sodeça si maj baro e tuliphandenqo gin sar e zambilenqo gin? Tha` sar trandafirurănqo gin?
 b) Sodeça si maj tikno e krinurănqo gin sar e zambilenqo gin? Tha` sar tuliphandenqo gin?
 c) Sode tuliphanda thaj trandafirură si anθ-i bar?

| | | | |
|--|---|---|---|
|  |  |  |  |
| 278 | 245 | 163 | 47 |



2. I relàcia maškar o kideripen thaj o tiknederipen

Te palemdikhas!

Kaj te kerat e ginavipnasqi verifikàcia šaj te utilizisaras jekh maškar e mòdură:

Inkeren godăŕe!

E kideripnasqi pròba

$245 + 124 = 369$

kideripnaça $124 + 245 = 369$
 tiknederipnaça $369 - 245 = 124$
 $369 - 124 = 245$

E tiknederipnasqi pròba

$675 - 353 = 322$

• kideripnaça $322 + 353 = 675$
 • tiknederipnaça $675 - 322 = 353$

$+120$
 \longleftarrow \longrightarrow
 -120

O kideripen thaj o tiknederipen si mamujutne operàcie. Eksèmplo: $475 \begin{array}{l} \longleftarrow \\ \longrightarrow \\ -120 \end{array} 595$

Dikhen sar aplikisarel pes i relàcia maškar o kideripen thaj o tiknederipen vaš o arakhipen e biprinzarde termenosqo.

$$a + 147 = 259$$

$$a = 259 - 147$$

$$a = 112$$

$$112 + 147 = 259$$

$$b - 163 = 415$$

$$b = 415 + 163$$

$$b = 578$$

$$578 - 163 = 415$$

$$860 - c = 320$$

$$c = 860 - 320$$

$$c = 540$$

$$860 - 540 = 320$$

Klasaqe bută!

1. Ginaven, palal kodoja keren i verifikàcia anθar i pròba:

a) $340 + 120$

b) $364 + 235$

c) $796 - 574$

$285 - 132$

$869 - 536$

$426 + 243$

2. Xramosaren anθ-e štartorre, palal kodoja pheren e tabèlurà!

| | | | |
|----------------|-----|-----|-----|
| Tèrmeno | 375 | ? | 563 |
| Tèrmeno | 207 | 348 | ? |
| Sùma | ? | 828 | 782 |

| | | | |
|----------------------------|-----|-----|-----|
| Tiknederipnasqo gin | 875 | ? | 738 |
| Tiknederno | 229 | 255 | ? |
| Diferènca | ? | 317 | 440 |

3. Arakhen thaj xramosaren:

a) save gineça trebal kidårdo 327 kaj te del 562;

b) savo gin trebal lino anθar 682 kaj te del 425;

c) anθar savo gin si lino 36 kaj te del 315.

3. O kideripen thaj o tiknederipen nakhindoj e jekhimatenqo thaj dešenqo òrdino

Anθ-o telutno tabèlo si xramosardo e kåràmidenqo gin save sas kerde anθ-jekh milaj. Komponisaren thaj rezolvisaren problème, utilizisarindoj kadala dàte.

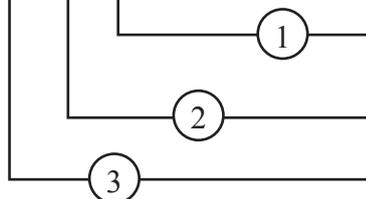
| | Jùnio | Jùlio | Àgusto | Totàlo |
|--------------------|-------|-------|--------|--------|
| I familia 1 | 235 | ? | 427 | ? |
| I familia 2 | 289 | 243 | ? | ? |
| Totàlo | ? | 611 | 845 | |

Dikhen e ginavipnasqo mòdo.

a) $235 + 289 = ?$

$$\begin{array}{|c|c|c|} \hline 2 & 3 & 5 \\ \hline \end{array} + \begin{array}{|c|c|c|} \hline 2 & 8 & 9 \\ \hline \end{array} = \begin{array}{l} 200+30+5+200+80+9 \\ \hline 400+110+14 \\ \hline 524 \end{array}$$

| | | | | | |
|--|---|---|---|---|--|
| | | | | | |
| | 1 | 1 | | | |
| | 2 | 3 | 5 | + | |
| | 2 | 8 | 9 | | |
| | 5 | 2 | 4 | | |
| | | | | | |



Kidàren pen e jekhimata: $5 + 9 = 14$ vaj **1** deš thaj **4** jekhimata. Xramosarel pes i cifra 4 ka-e jekhimata thaj avere rigaθe 1 deš vaš e dešenqo kideripen

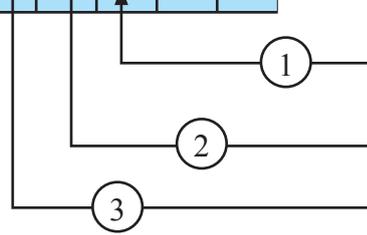
Kidàren pen **deša**: $3 + 8 + 1 = 12$ vaj **1** šel thaj **2** deša. Xramosarel pes 2 ka-e deša thaj aver rigaθe **1** šel vaš e šelenqo kideripen.

Kidàren pen e **šela**: $2 + 2 + 1 = 5$

b) $611 - 243 = ?$

$$\begin{array}{r} 611 - \quad \longrightarrow \quad 500 + 100 + 10 + 1 \\ 243 \quad \quad \quad \quad \quad 200 + 40 + 3 \\ \hline 368 \quad \quad \quad \quad 300 + 60 + 7 + 1 \end{array}$$

| | | | | | |
|--|---|---|---|---|--|
| | | | | | |
| | . | . | | | |
| | 6 | 1 | 1 | - | |
| | 2 | 4 | 3 | | |
| | 3 | 6 | 8 | | |
| | | | | | |



Dikhel pes ke $1 < 3$, deç na šaj te ginavel pes o tiknederipen **1-3**. Liel pes kaθar e deša jekh deš, savi kerdōl **10** jekhimata, kidāren pen e jekhimata thaj akana si **11** jekhimata. Tiknederen pen e jekhimata: **$11 - 3 = 8$**

Maj ačhile **0** deša. $0 < 4$, deç na šaj te ginavel pes o tiknederipen. Liel pes jekh šel, savi kerdōl **10** deša, tiknederen pen e deša: **$10 - 4 = 6$**

Maj ačhile **5** šela. Tiknederen pen e šela: **$5 - 2 = 3$**

Alosaren e ginavipnasqo kamlo mòdo thaj arakhen e gina save nanaisaren anθar o tabèlo!

Dikhen, kerindoj i pròba, te si čaço o rezolvisaripen vaj na!

Klasaqe bută!

1. Ginaven, palal kodoja keren i pròba:

- a) $179 + 545$ b) $656 + 179$ c) $527 + 296$
 $534 - 340$ $723 - 387$ $800 - 538$

2. Arakhen i sùma thaj i diferènca vaš svāko ginenqo zuto: 569 thaj 246; 327 thaj 295; 538 thaj 177.

3. Xramosaren anθ-e šartorre thaj arakhen e gina save si garavde palal e čerxenōrrā.

- a) $35^* + 186$ $705 - 36^*$ b) $4^*2 + 329$ $64^* - 192$ c) $673 + 16^*$ $570 - 3^{**}$
 $*45$ $*27$ 82^* 4^*8 8^{**} $*36$

4. Anθ-jekh vurdonenqo pàrko si 420 thana vaš e vurdonā. Sode thana si čuće, kana 225 thana si pherde vurdonenča?

5. Vaš jekhe barāqo vazdipen sas utilizisarde 196 kārāmide thaj maj ačhile 175 kārāmide. Sode kārāmide sas anθ-o totālo?

6. Anθ-o rromano pèro ziven 395 zene. 196 anθar lenθe si kīkavārā, 82 anθar lenθe si bašavne, haj kolaver zene si ričhinārā.

- a) Arakhen sode zene si ričhinārā!
 b) Arakhen sode zene na si bašavne!



4. Evaluàcia

1. Xramosar e naturālo gina save si maškar:

- a) 396 thaj 408; b) 645 thaj 634; c) 889 thaj 900!

2. Xramosar: a) o maj baro gin kerdo anθar trin cifre;
 b) o maj tikno gin kerdo anθar trin verver cifre;
 c) o maj tikno gin zuteča kerdo anθar trin cifre!

3. Rotalisar: a) ka-e šela, e gina: 180; 220; 380; 440; 575;
b) ka-e deša, e gina: 737; 586; 473; 458; 632!

4. Ginav:

- a) $520 + 147$ b) $438 + 525$ c) $826 + 198$
 $685 - 234$ $983 - 356$ $800 - 427$

5. Arakh:

- a) e ginenqi sùma 326 thaj 485;
b) e ginenqi diferènca 623 thaj 286;
c) o gin 328-ença maj baro sar e ginenqi diferènca 720 thaj 425!

6. Xramosar o trebutno sèmno ($<$; $=$; $>$) kaj te aresel pes ka-e čaće relàcie!

- a) $728 \square ? 326 + 295$ b) $674 - 352 \square ? 322$ c) $577 - 321 \square ? 345 + 198$

7. Trine naturalone ginenqi sùma si 897. O anglutno gin si 285, haj o dujto gin si 163-ença maj baro sar o jekhto gin. Arakh o trinto gin!

| Ìtemo \ Kalifikativo | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|---------|---------|------|---------|---------|---------|------------------|
| Dòsta | a | a | - | a | a | a | jekh ginavipen |
| Mišto | a, b | a, b | a | a, b | a, b | a, b | duj ginavimata |
| But mišto | a, b, c | a, b, c | a, b | a, b, c | a, b, c | a, b, c | pherdo ginavipen |



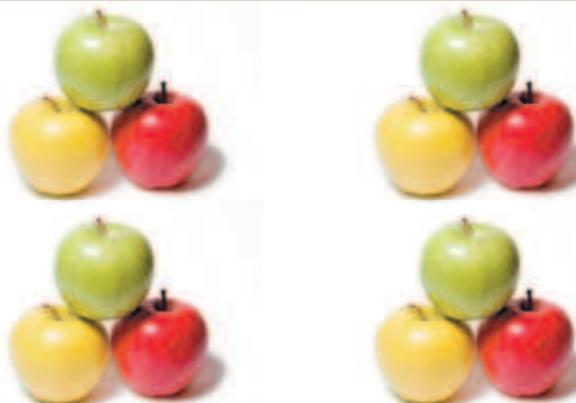
III. O BUTÀRIPEN

1. O palemkerdo kideripen e barabare termenurença

K-i òra vaš e tehnologiaqi edukàcia, trin siklòvne kerde sarkon zeno po štar kuća. Sode kuća kerde e trin siklòvne khethanes?



Ginavas anθar o kideripen. Kidären pen **trin var po 4 čitre.**



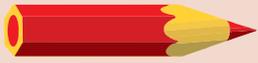
O tèrmeno 3 arakhel pes 4 var.

$$3 + 3 + 3 + 3 = 6 + 3 + 3 = 9 + 3 = 12$$

$$6 + 3 + 3$$

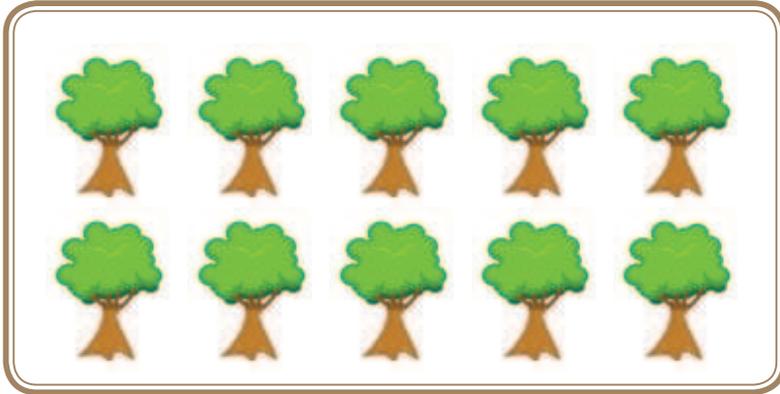
$$9 + 3$$

$$12$$



Inkeren godăthe! $3 + 3 + 3 + 3$ si jekh palemkerdo kideripen e barabare termenurença.

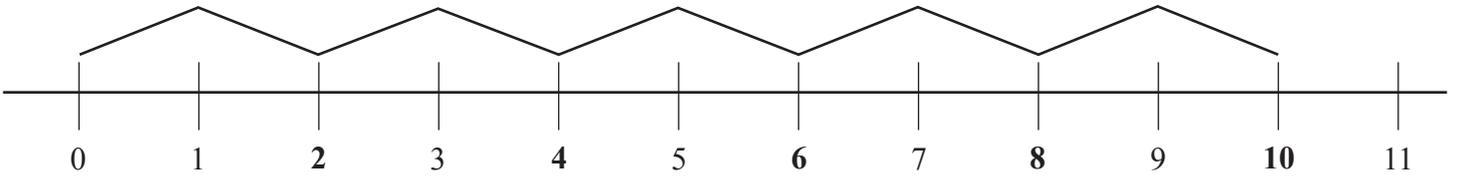
Arakhen e rukhenço gin, ginavindoj anθar o palemkerdo kideripen!



Ašti te ginaven labărindoj e ginenqi àksa!

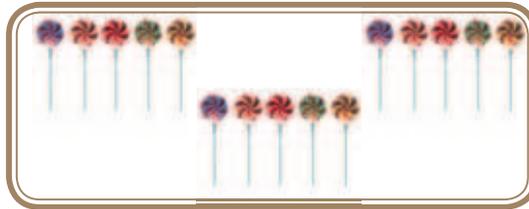
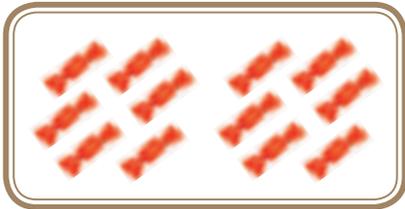


$2 + 2 + 2 + 2 + 2 = ?$

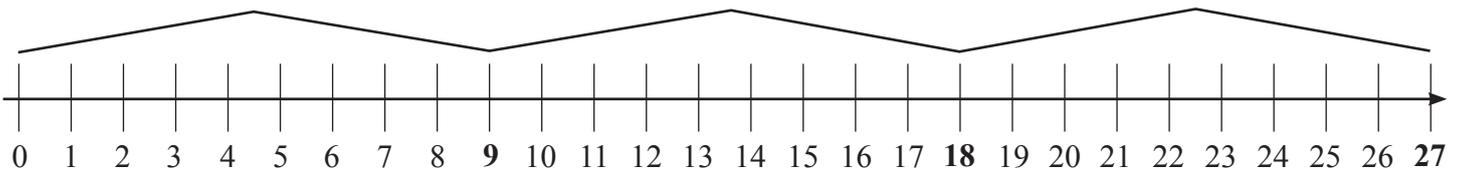
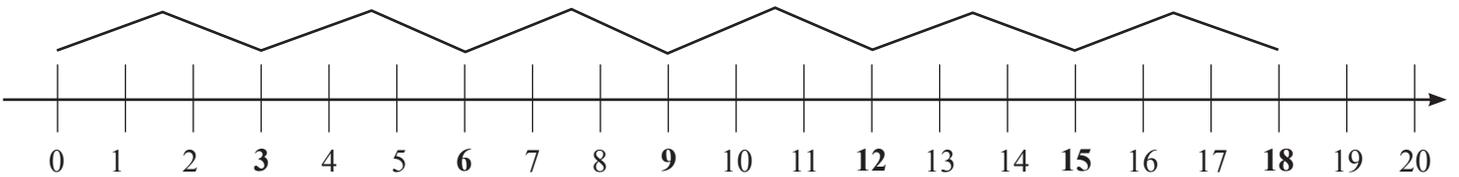


Klasaqe bută!

1. Sode bombòne si? Ginaven anθar palemkerdo kideripen e barabare termenurença!



2. Xramosaren e palemkerde kiderimata save si reprezentisarde p-e ginenqi àksa!



3. Xramosaren e palemkerde kiderimata anθ-e save:

- a) o tèrmeno 5 arakhel pes 3 var! b) o tèrmeno 8 arakhel pes 4 var!

4. Ginaven:

- a) $4 + 4 + 4$ b) $7 + 7 + 7 + 7$ c) $12 + 12 + 12$
 $6 + 6 + 6$ $3 + 3 + 3 + 3$ $25 + 25 + 25 + 25$

5. O kak kindās vaš e trin nepòtură po 5 angrustnă. Sode angrustnă kindās o kak?
6. La Izaura sasas la 6 akvarèle. Krećunosθe, i Izàura xudās trin kutie, svàko kutia po šove akvarelença. Sode akvarèle si la Izaura?
7. Xramosaren o gin 18, sar sùma trine barabare termenurenqi.
8. I Elèna drabarel svakone dīvesesθe anθar o kurko po 8 patrină anθar jekh lil. Sode patrină drabardās anθ-e štar dīvesa? Tha` anθ-jekh kurko?
9. Xramosaren o gin 36 sar:
 - a) sùma duje barabare termenurenqi;
 - b) sùma trine barabare termenurenqi;
 - c) sùma štare barabare termenurenqi.

2. O butăripen e naturalone ginenqo

K-e laqo bijandipnasqo dīves, i Leòna xudās kaθar 4 kolègură po 2 balònură. Sode balònură xudās i Leòna?



$$2 + 2 + 2 + 2 = 4 + 2 + 2 = 6 + 2 = 8$$

• 4 var po 2 balònură šaj xramosarel pes:

$$4 \times 2 = 2 + 2 + 2 + 2 = 8$$

O gin 4 si o gin savo sikavel sode var arakhel pes o 2.

O gin 2 si o gin savo palem kidărel pes.

× si e butăripnasqo sëmno.



Xudem 4 var po 2 balònură!



Inkeren godăθe!

$4 \times 2 = 8$ drabarel pes:

4 butărdò e 2-ça kerel 8

vaj

4 var 2 kerel 8

$$4 \times 2 = 8$$

fàkto ro fàkto ro prodùso

• **Dikhen!**

3 5 var

| | | | | |
|---|---|---|---|---|
| • | • | • | • | • |
| • | • | • | • | • |
| • | • | • | • | • |

4 6 var

| | | | | | |
|---|---|---|---|---|---|
| • | • | • | • | • | • |
| • | • | • | • | • | • |
| • | • | • | • | • | • |
| • | • | • | • | • | • |

E fàkto rură si e gina save butăren pen.

O prodùso si e butăripnasqo rezultàto.

× drabarel pes “var”



Klasaqe bută!

1. Dikhen o ćitro thaj phenen sode birovlă kiden avđin anθar e luludă.

Ginaven anθar:

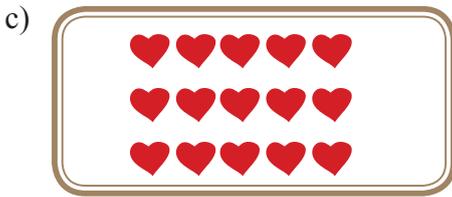
- a) palemkerdo kideripen;
b) butăripen.



2. Dikhen e ćitre thaj xramosaren butăripnasqo trebutno ginavipen vaš svăko ćitro, palal o modėlo:



2×2



3. Xramosaren, sar butărimata, e avutne palemkerde kiderimata e barabare termenurença.

- a) $5 + 5 + 5$ b) $4 + 4 + 4 + 4$ c) $3 + 3 + 3 + 3 + 3 + 3$
 $8 + 8 + 8$ $4 + 4 + 4 + 4 + 4$ $9 + 9$

4. Xramosaren e butărimata anθ-e save:

- a) o gin 5 arakhel pes 6 var; b) o gin 3 arakhel pes 7 var;
c) o gin 8 arakhel pes 4 var; d) o gin 7 arakhel pes 3 var.

Ginaven e prodűsură anθar palemkerdo kideripen.

5. Rezolvisaren e butărimata anθar palemkerdo kideripen e barabare termenurença.

- a) 5×2 b) 2×12 c) 3×9 d) 7×7
 5×7 4×10 8×4 6×15
 5×9 5×6 8×3 4×12

6. Save maškar e avutne propozicie si ćaće thaj save na si ćaće?

- a) $3 + 3 + 3 + 3 + 3 = 5 \times 3$ b) $3 \times 4 = 3 + 3$ c) $8 + 8 + 8 = 2 \times 8$
 $1 + 1 + 1 + 1 + 1 = 1 \times 1$ $3 \times 7 = 7 + 7 + 7$ $5 \times 4 = 4 + 4 + 4 + 4 + 4$

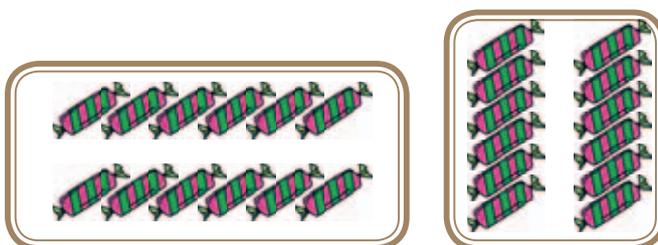
7. Jekh gilavno zanel te gilavel 72 gilă. Anθ-e 6 dűvesa gilabavdăš po 8 verver gilă svakone dűvesesθe.

- a) Sode gilă gilabavdăš o gilavno?
b) Sode gilă maj si te gilabel o gilavno?

Si man maj
but bombòne!

3. E butăripnasqe proprietete/ xarakteristike

Patăv ke man
si man maj
but!

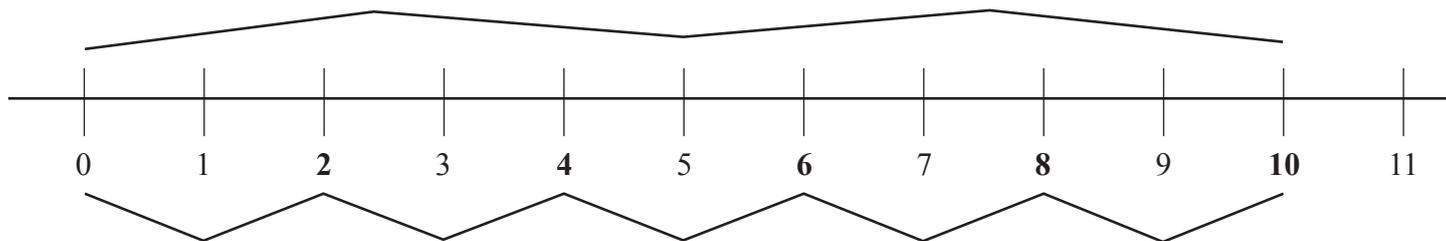


Save çhaves si les çacipen?

Te ginavas sode bombone si sarkones:

$$2 \times 5 = 5 + 5 = 10$$

$$5 \times 2 = 2 + 2 + 2 + 2 + 2 = 10$$



Dikhen!



$$3 + 3 + 3 + 3 + 3 = 15$$

5 var po 3, kadja:

$$5 \times 3 = 15$$

Šaj te xramosar: $5 \times 3 = 3 \times 5 = 15$



$$5 + 5 + 5 = 15$$

3 var po 5, kadja:

$$3 \times 5 = 15$$



Inkeren godăthe!

K-o butăripen, kana paruvav e faktorurenqi òrdina, o prodùso na paruvav pes.

• O Maradona xulavdăs e golnă anθ-e 3 grùpură. Anθ-o svăko grùpo thovdăs p-e 2 rëndură po 4 golnă. Sode golnă si anθ-o totălo?



O totălo gin e golnăno šaj te ginavel pes kadja:

$$3 \times 2 \times 4 = 3 \times 8 = 8 + 8 + 8 = 24$$



Šaj te ginavas vi kadja:

$$3 \times 2 \times 4 = 6 \times 4 = 24$$

Klasaqe bută!

1. Dikhen o çitro!

• Anθ-e 4 rëndură 7 çerxenòrrënça si 28 çerxenòrră.

$$4 + 4 + 4 + 4 + 4 + 4 + 4 = 28$$

• Anθ-e 7 kolòne 4 çerxenòrrënça si 28 çerxenòrră.

$$\text{Deç: } 4 \times 7 = 7 \times 4 = 28$$

Sikaven p-e ginenqi àksa: $4 \times 7 = 7 \times 4 = 28!$



2. Dikhen o çitro!

• O totălo gin e kiresenqo arakhel pes anθar i operàcia 3×8 vaj 8×3 .

• Ginaven o totălo gin e kiresenqo, utilizisarindoj o palemkerdo kideripen, anθ-o savo palem avel:

a) o tèrmeno 3;

b) o tèrmeno 8.

3. Xramosaren anθ-e štartorre thaj thon o tèrmeno savo nana-i:

$$a) 4 \times 5 = \square \times 4$$

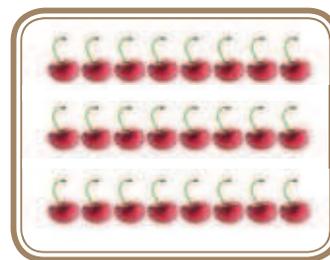
$$b) 5 \times 7 = 7 \times \square$$

$$c) 6 \times \square = 4 \times 6$$

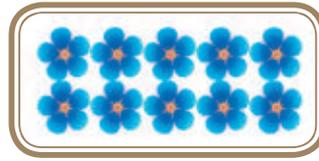
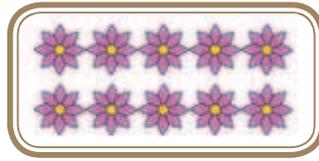
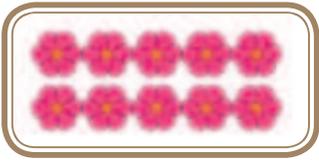
$$3 \times 7 = 7 \times \square$$

$$2 \times \square = 8 \times 2$$

$$\square \times 9 = 9 \times 4$$



4. O Papi thovdäs luludä anθ-e 3 sträturä. Sväko sträto si les 2 rëndurä, haj p-o sväko rëndo si 5 luludä. Sode luludä thovdäs o Papi?



5. Arakhen e tërmenurä save nana-i:

$$3 \times 4 \times 6 = 3 \times 6 \times \square = 3 \times 4 \times \square = 4 \times \square \times 6$$

$$7 \times 6 \times 5 = 5 \times 7 \times \square = 5 \times 6 \times \square = \square \times 7 \times 6$$

6. Xramosaren e prodùsurä anθar 2 fäktorurä, sar prodùsurä anθar 3 fäktorurä, palal o dino modëlo:

$$3 \times 8 = 3 \times 4 \times 2$$

a) 9×4 b) 6×5

2×8 12×3

4. O butäripen kana jekh anθar e fäktorurä si 2

• Ka-jekh konkùrso, aresle p-o jekhto than 2 ekipe.

Sväko ekipa si kerdi anθar 3 zene.

Sode çhave aresle p-o jekhto than?



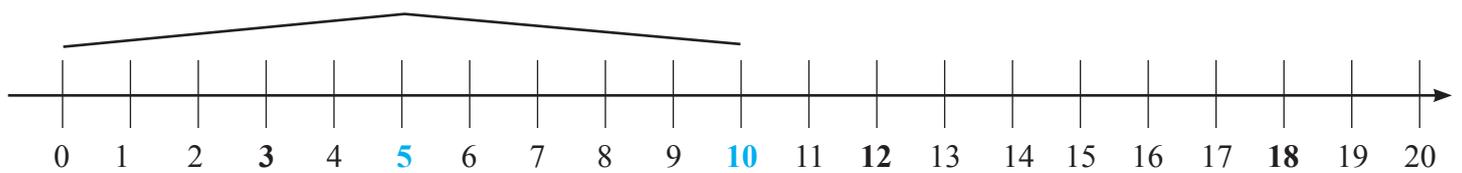
P-o jekhto than aresle dujvar po 3 çhave.

$$2 \times 3 = 3 + 3 = 6$$

Sode çhave areslenas p-o jekhto than, kana e ekipe avilenas kerde anθar 5 zene?



Ginavas $2 \times 5 = ?$, utilizisarindoj e ginenqi äksa:



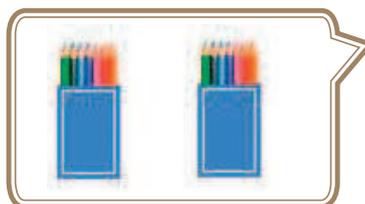
$$2 \times 5 = 5 + 5 = 10$$

• La Kasandra si la jekh kutia 7 rangärde angarnença. Le Dorinos si les 2 kutie sakodole tiposqo.

Sode angarne si le Dorinos?



7 angarne



duj var po 7 angarne: $2 \times 7 = 14$

O gin 14 si o dujvarno e ginesqo 7.



Inkeren godäθe!

Kana butäras jekh gin 2-eça lias jekh gin dujvar maj baro, anavärdo e ginesqo dujvarno.

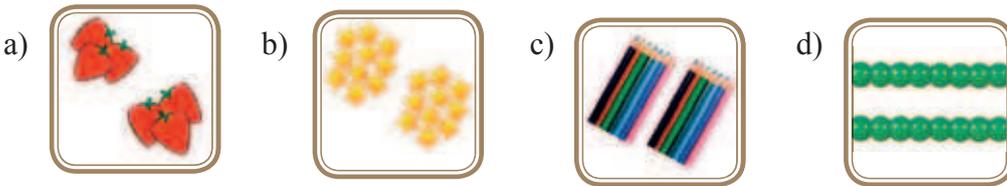
• Ginaven e ćerxenőrră po 2.



| | | | | | | | | | | |
|---|---|---|---|---|----|----|----|----|----|----|
| 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |

Klasaqe bută!

1. Xramosaren e butărimata reprezentisarde anθ-e ćitre!

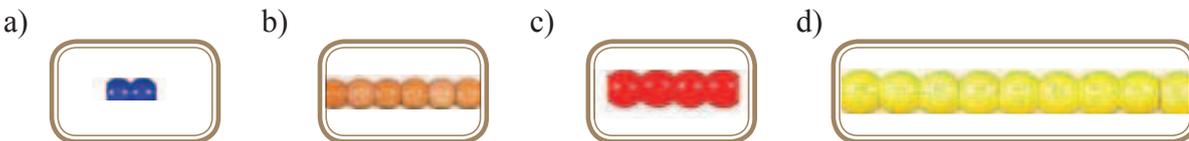


2. Xramosaren e palemkerde kiderimata e barabare termenurenća sar butărimata:

- a) $3 + 3$ b) $7 + 7$ c) $8 + 8$ d) $2 + 2$
 $5 + 5$ $4 + 4$ $6 + 6$ $9 + 9$

3. Arakhen e gina: a) 2-eća maj bare sar: 4; 9; 6; 8.
 b) dujvar maj bare sar: 4; 9; 6; 8.

4. Ginaven e bile. Vaś svăko kėzo, ćitren p-o śtartorro jekh dujvarno bilenqo gin:



5. Arakhen o dujvarno sarkone maśkar e gina: 4; 7; 8; 5.

6. Arakhen e ginenqo prodűso: 2 thaj 6; 2 thaj 4; 2 thaj 9; 2 thaj 10.

7. P-o svăko răfto si 8 lila. Sode lila si p-e duj răftură?

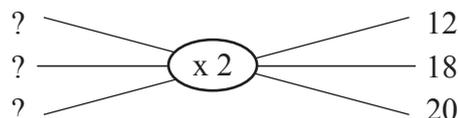
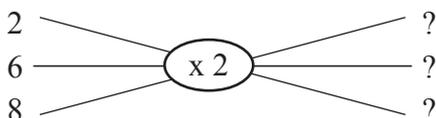
8. O Mărius ćitrărdăs 7 śtarigale. Sode śtarigale trebal te maj ćitrărel paśal lenθe, kaj te avel jekh śtarigalenqo dujvarno gin?

9. Maj but ćhavorre gele k-i derăv. Len si len duj căxre. Anθ-i svăko căxra sovena po 6 ćhavorre. Sode ćhavorre gele k-i derăv?

10. I Esmeralda thaj i Geovăna gele ka-o plajin. Von planifikisarde penqe te keren, anθ-e svăko dűves, po 2 phiravimata. Sode phiravimata kerena anθ-e 4 dűsa?

11. Le Marinos si les 9 lila, haj le Ionos dujvar maj but. Thon o pućhipen kaj te rezolvisaren: a) anθar jekh operăcia; b) anθar duj operăcie.

12. Dikhen e skėme thaj arakhen e gina save nana-i!



5. O butäripen kana jekh anθar e fäktorurä si 3

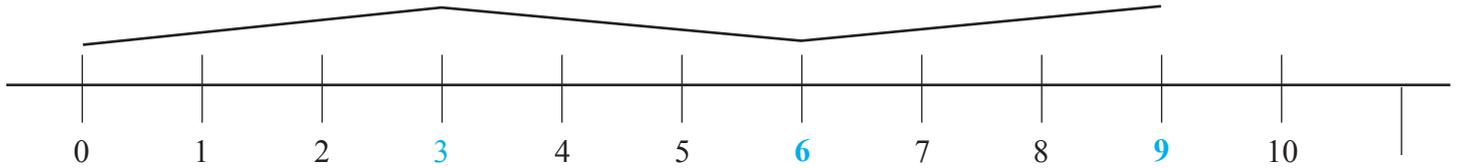
• Sode çhave khelen anθ-o spektäkulo vaś 8 Aprilo “O maśkarthemutno dïves e rromenqo”?



3 var po 3 çhave, kadja: $3 \times 3 = 3 + 3 + 3 = 9$

Amboldipen: 9 çhave

Śaj te ginavas utilizisarindoj e ginenqi äksa.



• Utilizisar e ginenqi äksa kaj te ginaves 3×5 .

$$3 \times 4 = ?$$

$$4 + 4 + 4 = 3 \times 4 = 12$$



$$3 \times 7 = ?$$

$$7 + 7 + 7 = 3 \times 7 = 21$$



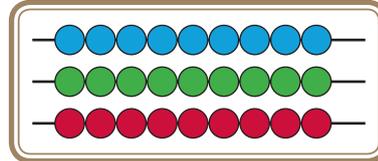
• Pa jekh thav si 9 mirikle.

Sode mirikle si p-e 3 thava sa kodole çhandosqe?



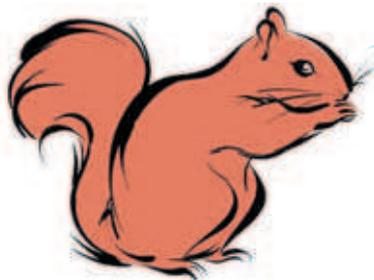
P-e 3 thava avena trinvar maj but mirikle.

$$3 \times 9 = 9 + 9 + 9 = 27$$

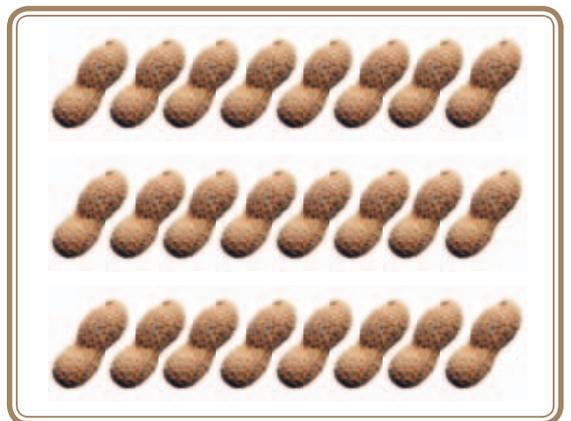


Inkeren godăθe!

Kana butäras jekh gin 3-eça, aresas ka-jekh gin trinvar maj baro, anavärdo trinvarno kadale ginesqo.



Si man trin var 8 pendexa!
Sode pendexa si man?

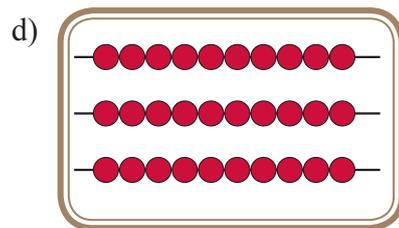
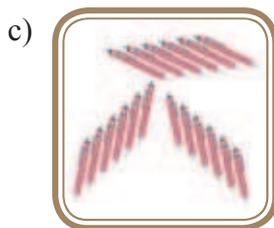
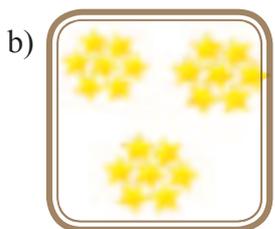
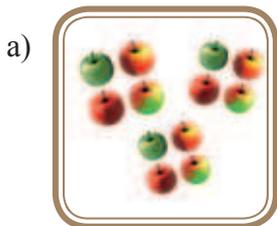


Trinvar 8 vaj $3 \times 8 = 24$

| | | | | | | | | | | |
|-----|---|---|---|----|----|----|----|----|----|----|
| 3 x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |

Klasaqe bută!

1. Xramosaren e butërimata reprezentisarde anθ-o svàko cìtro!



2. Xramosaren sar butërimata kadala palemkerde kiderimata e barabare termenurença:

a) $7 + 7 + 7$ b) $10 + 10 + 10$ c) $13 + 13 + 13$ d) $20 + 20 + 20$

3. Ginaven anθar palemkerdo kideripen e barabare termenurença.

a) $3 \times 4 = ?$ b) $3 \times 8 = ?$ c) $7 \times 3 = ?$ d) $4 \times 3 = ?$
 $3 \times 6 = ?$ $3 \times 2 = ?$ $9 \times 3 = ?$ $3 \times 5 = ?$

4. Arakhen e gina: a) 3-eça maj bare sar: 5; 9; 6; b) trinvar maj bare sar: 5; 9; 6!

5. Arakhen e ginenqo trinvarno: 3; 7; 5!

6. Jekhe lovares si les 7 bikinipnasqe grasta, haj lesqe phrales, trinvar maj but. Sode grasta si khethanes le lovaren?

7. Duje ginenqo prodùso si 24. Save šaj te aven e gina?

8. Arakhen i diferènca maškar e ginenqo prodùso 3 thaj 8 thaj o maj tikno naturàlo gin zuteça xramosardo duje cifrença!

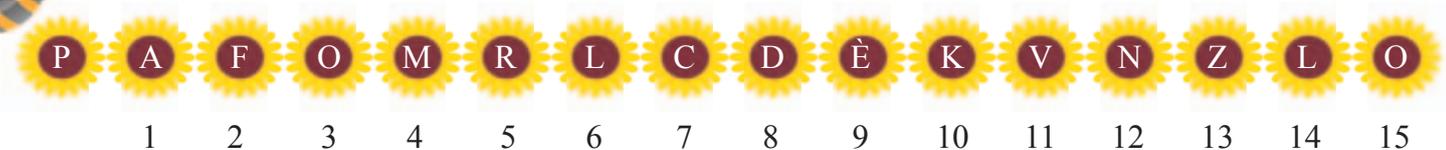
9. Xramosaren anθ-e štartorre thaj pheren e trebutne ginença kaj te aresen ka-e çaçe propozicie!

a) $3 \times 5 = ? \times 3$ b) $2 \times ? \times 3 = 9 \times 2$
 $8 \times 3 = ? \times 8$ $4 \times ? \times 2 = 6 \times 4$



Inkeren godăthe!

I birovlì xuràl, thovindoj pes svàko dàta/var p-i trinto luludì. Xramosaren e grafème anθ-i òrdina anθ-i savi ačhel i birovlì thaj arakhena so kidel voj anθar e luludă.



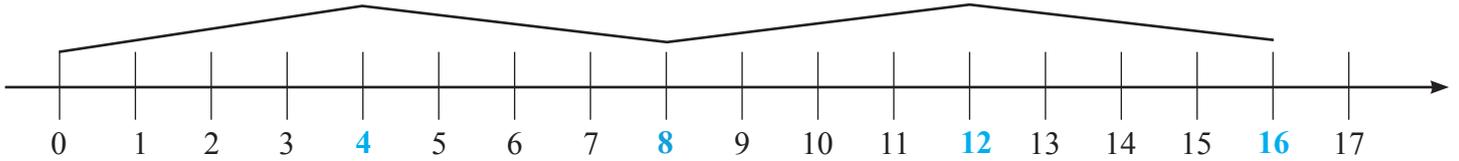
6. O butäripen kana jekh anθar e fäktorurä si 4

- Jekh familä si la 4 zene. Sode zene si anθ-o totälo and-o kadava ätro?



4 var po 4 zene

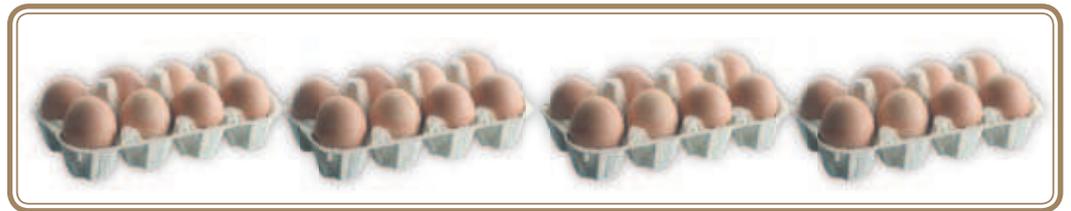
vaj: $4 \times 4 = 4 + 4 + 4 + 4 = ?$



- Väs jekh marikli utilizisaren pen 8 anre. Sode anre utilizisaren pen väs 4 sa kodole fälösqe mariklä?

4 var po 8 anre:

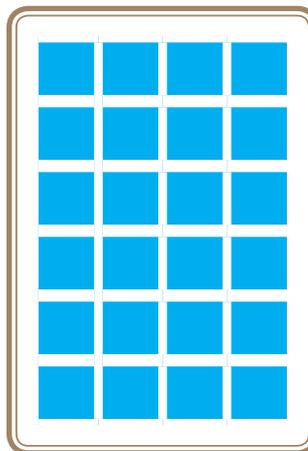
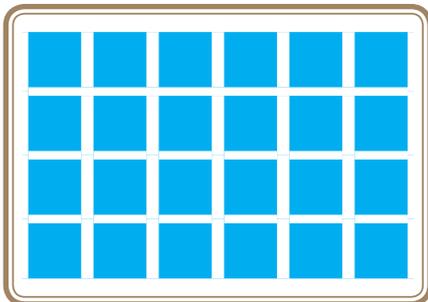
$4 \times 8 = 8 + 8 + 8 + 8 = 32$



Inkeren godäθe!

Kana butäras jekh gin 4-eça, aresas ka-jekh gin 4 var maj baro sar o dino gin.

- Sode štarigale si?



$4 \times 6 = 6 + 6 + 6 + 6 = 24$

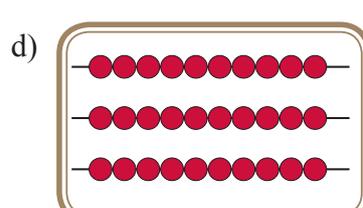
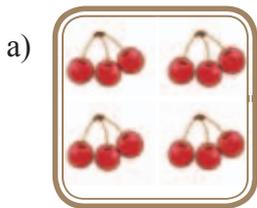
$6 \times 4 = 4 + 4 + 4 + 4 + 4 + 4 = 24$

- Keren jekh ätro anθar savo te arakhen e butärimatenqo prodùso 9×4 thaj 4×9 !

| | | | | | | | | | | |
|-----|---|---|----|----|----|----|----|----|----|----|
| 4 x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |

Klasaqe bută!

1. Xramosaren e butërimata trebutne vaš e çitre!



2. Ginaven anθar palemkerdo kideripen!

- a) 4×8 b) 4×3 c) 4×9

3. Xramosaren sar prodùsură kadala palemkerde kiderimata e barabare termenurença:

- a) $4 + 4 + 4 + 4$ b) $2 + 2 + 2 + 2$ c) $13 + 13 + 13 + 13$
 $7 + 7 + 7$ $1 + 1$ $25 + 25 + 25$

4. Den pen e gina: 5; 9; 7; 11. Arakhen e gina save si:

- a) 4-ça maj bare; b) 4-eça maj tikne; c) 4 var maj bare!

5. Arakhen i sùma, i diferënca thaj e ginenqo prodùso 9 thaj 4!

6. Çitren e tabèlură anθ-e štartorre thaj pheren e biprinzarde ginença!

| | | | | | |
|----------------|---|----|----|----|----|
| fàktoro | 3 | | 4 | | |
| fàktoro | 4 | 6 | | 7 | 4 |
| prodùso | | 24 | 12 | 28 | 32 |

| | | | | | |
|----------------|---|----|----|----|----|
| fàktoro | 4 | 5 | | 4 | |
| fàktoro | 5 | | 4 | | 4 |
| prodùso | | 20 | 16 | 36 | 40 |

So dikhle?

7. Anθ-jekh dës jekh kaštari kerel 8 skamina. Sode skamina kerel anθ-e 4 dës?

8. O prodùso si 32. Xramosaren e fàktorence zute save den kadava prodùso!

9. O Elvis bikindäs 8 angrustnä, haj lesqi phen 4-ença maj but. Sode angrustnä bikinde khethanes?

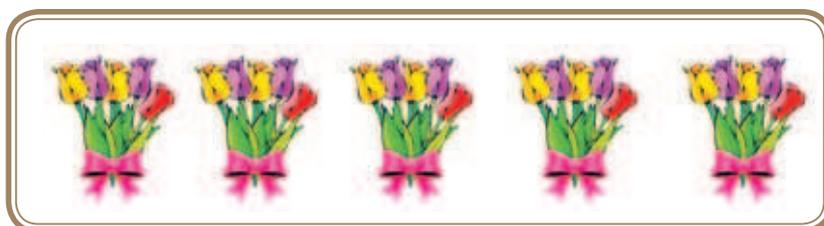
10. Jekh sasträri petalärdäs 5 grasta po panze petalença. Sode pètala utilizisarel o sasträri?

11. Xramosaren o gin 20 sar:

- a) duje naturalone ginenqi sùma; b) duje naturalone ginenqi diferënca;
 c) duje naturalone ginenqo prodùso!

7. O butërimata kana jekh anθar e fàktorură si 5

• I Milia si la 5 luludänqe vasta. Anθ-o svàko luludänqo vast si 5 tuliphanda. Sode tuliphanda si la Milia?



5 var po 5 tuliphanda vaj: $5 \times 5 = 5 + 5 + 5 + 5 + 5 = 25$

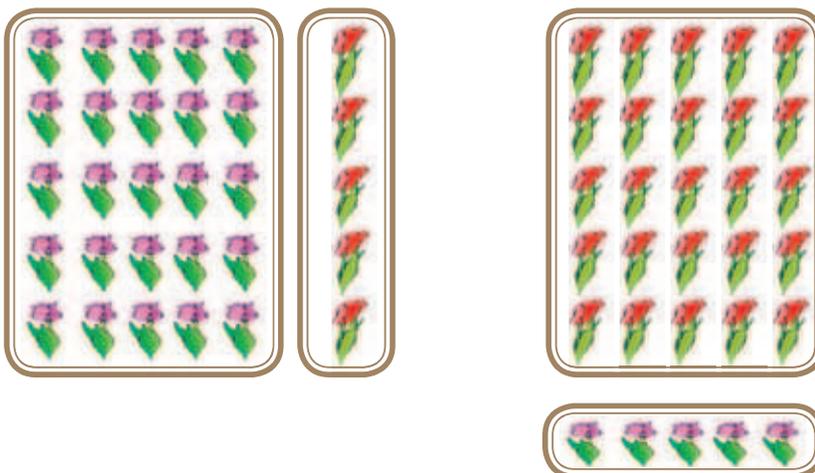
I Milia maj thol po jekh tuliphand anθ-o svàko luludànqo vast.

Sode tuliphanda si akana?

$$5 \times 5 = 25$$

tha`

$$5 \times 6 = ?$$



$$\begin{aligned} 5 \times 6 &= 5 \times 5 + 5 = \\ &= 25 + 5 = \\ &= 30 \end{aligned}$$

$$\begin{aligned} 6 \times 5 &= 5 \times 5 + 5 = \\ &= 25 + 5 = \\ &= 30 \end{aligned}$$

$$\begin{aligned} 7 \times 5 &= ? \\ 7 \times 5 &= 6 \times 5 + 5 = \\ &= 30 + 5 = \\ &= 35 \end{aligned}$$

$$\begin{aligned} 8 \times 5 &= ? \\ 8 \times 5 &= 7 \times 5 + 5 = \\ &= 35 + 5 = \\ &= 40 \end{aligned}$$

$$\begin{aligned} 9 \times 5 &= ? \\ 9 \times 5 &= 8 \times 5 + 5 = \\ &= 40 + 5 = \\ &= 45 \end{aligned}$$

• Utilizarindoj e eksèmplurà maj opral, phenen svakone butàripnasqo rezultàto!

$$5 \times 7 = ?$$

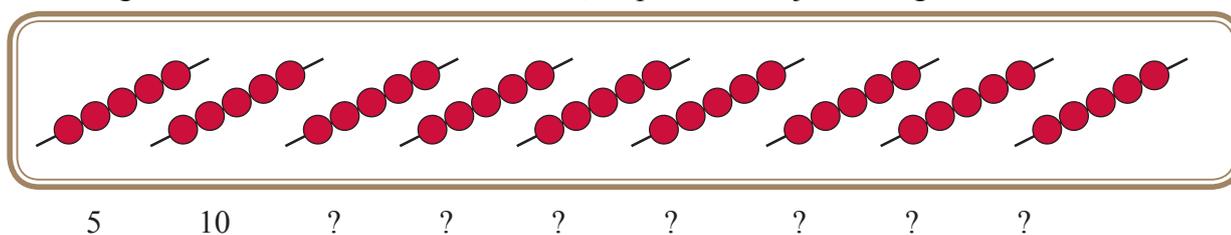
$$5 \times 8 = ?$$

$$5 \times 9 = ?$$

| | | | | | | | | | | |
|-----|---|----|----|----|----|----|----|----|----|----|
| 5 x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |

Klasaqe butà!

1. Phenen e gina save thavden anθ-o telutno šíro, respektisarindoj i dini règula!



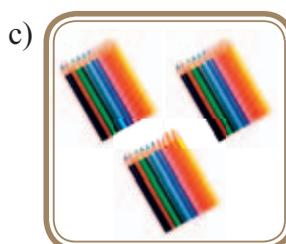
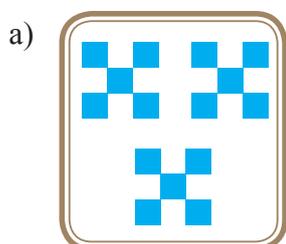
2. Xramosaren e palemkerde kiderimata sar butàrimata!

a) $4 + 4 + 4 + 4 + 4$
 $4 + 4 + 4$

b) $7 + 7 + 7 + 7$
 $7 + 7 + 7 + 7 + 7$

c) $1 + 1 + 1 + 1 + 1$
 $12 + 12 + 12 + 12 + 12$

3. Xramosaren e trebutne butàrimata vaš svàko cítro!



4. Arakhen e gina panzvar maj bare sar: 3; 6; 11; 9!

5. Xramosaren anθ-e štartorre thaj pheren e tabèlurà!

| | | | |
|---|----|---|---|
| x | 6 | 7 | 8 |
| 4 | 24 | | |
| 5 | | | |

| | | | |
|---|---|---|---|
| x | 3 | 2 | 5 |
| 5 | | | |
| 6 | | | |

| | | | |
|---|---|---|---|
| x | 6 | 5 | 4 |
| 8 | | | |
| 9 | | | |

6. E siklòvne anglekerde jekh artistikano progràmo.

a) 2 grùpurà kerde anθar po 5 çhave phende poezie. Sode çhave phende poezie?

b) 9 çhave khelde anθ-jekh teatrosqi pièsa, haj anθ-o kòro gilabavde 5 var maj but çhave sar kodola ka-i khelde teàtro. Sode çhave gilabavde anθ-o kòro?

c) Kana 5 çhave gilabavde ka-o akordeòno, sarkon çhavo gilabavindo j po duj gilà, Sode gilà sas gilabavde?

8. O butàripen kana jekh anθar e fàktorurà si 6

| | | | |
|------|-------------------|-------|-------------------|
| Kana | $2 \times 6 = 12$ | atùnc | $6 \times 2 = 12$ |
| | $3 \times 6 = 18$ | | $6 \times 3 = 18$ |
| | $4 \times 6 = 24$ | | $6 \times 4 = 24$ |
| | $5 \times 6 = 30$ | | $6 \times 5 = 30$ |

Varesode butàrimata anθ-e save jekh fàktoro si 6 siklilàm len maj anglal!



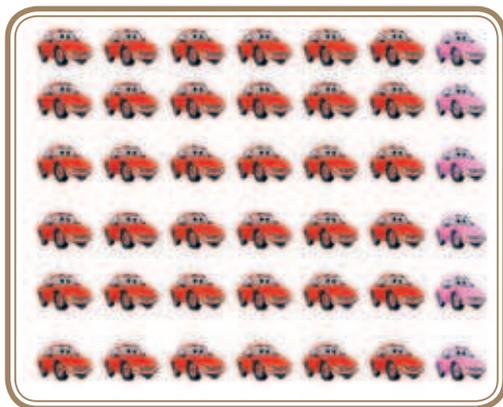
• Kaj te sukaràren penqi klàsa, e siklòvne çitràrde luludà. Sode luludà çitràrde?



Si 6 var po 6 luludà, kadja: $6 \times 6 = 6 + 6 + 6 + 6 + 6 + 6 = 36$

Amboldipen: 36 luludà

Dikhen e çitre thaj arakhen e ginavipnasqo mòdo!



$$6 + 6 + 6 + 6 + 6 + 6 + 6 = 42$$

$$7 \times 6 = 6 \times 6 + 6 =$$

$$= 36 + 6 =$$

$$= 42$$



$$6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = 48$$

$$8 \times 6 = 7 \times 6 + 6 =$$

$$= 42 + 6 =$$

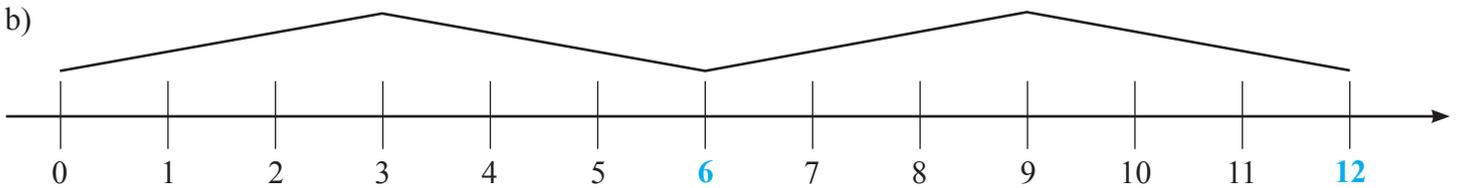
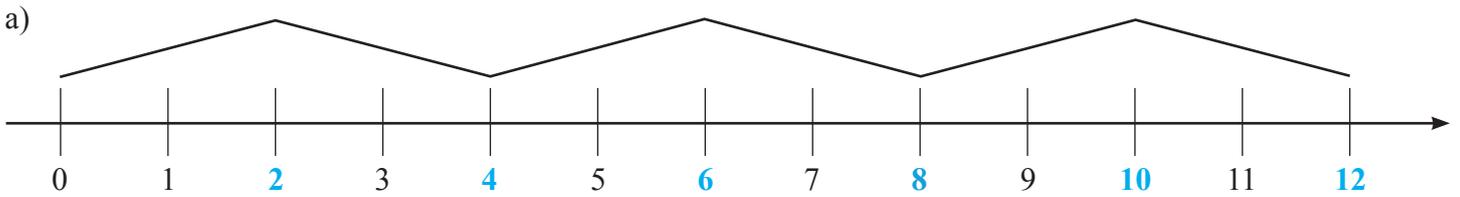
$$= 48$$

Keren jekh çitro kaj te ginaves 9×6 .

| | | | | | | | | | | |
|-----|---|----|----|----|----|----|----|----|----|----|
| 5 x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |

Klasaqe bută!

1. Xramosaren e butërimata reprezentisarde p-i svàko àksa.



2. Xramosaren e palemkerde kiderimata e barabare termenurença sar butërimata:

a) $5 + 5 + 5 + 5 + 5 + 5$ b) $6 + 6 + 6 + 6 + 6 + 6$ c) $15 + 15 + 15 + 15 + 15 + 15$
 $8 + 8 + 8$ $3 + 3 + 3 + 3 + 3$ $12 + 12 + 12 + 12$

3. Xramosaren an θ -e štartorre thaj palal kodoja pheren e faktorurença save nana-i kaj te aresel pes ka-e çaçe relàcie!

a) $4 \times 6 = \square \times 4$ b) $4 \times 8 = 8 \times \square$ c) $4 \times \square = \square \times 4$
 $8 \times 6 = \square \times 8$ $9 \times 6 = 6 \times \square$ $6 \times \square = 6 \times \square$

4. Arakhen e gina: a) 6-ça maj bare sar 5; 7; 8; 12;
 b) 6 var maj bare sar 5; 7; 8; 12; c) 6-ça maj tikne sar 5; 7; 8; 12!

5. Jekh siklârno kindäs 10 kutie rangärde angarnença. An θ -i svàko kutia si 10 angarne. Sode angarne kindäs o siklârno?

6. Jekh fàktoro si 2. O dujto fàktoro si trinvar maj baro sar o anglutno. Arakhen o prodùso e duje faktorurenço!

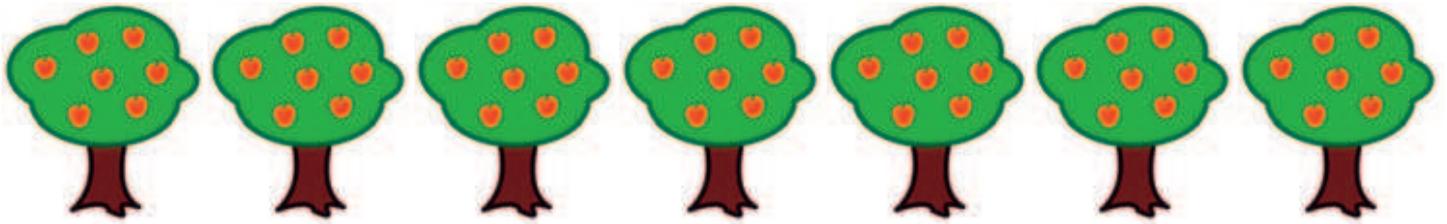
7. Xramosaren svàko maškar e gina 4; 9; 16; 25, 36 sar prodùso duje barabare faktorurenço!
 Eksèmple: $4 = 2 \times 2$

8. Le Mariusos si les 6 bombòne. I daj maj kinel lesqe 6 kutie, svàko kutia si 8 bombonença. Sode bombòne si le Mariusos akana?

9. Save gina butärde 6-eça den o prodùso:
 a) jekh gin ka θ ar o 30 si k-o 60; b) maj tikno sar 50; c) maj baro sar 50!

9. O butäripen kana jekh anθar e fäktorurä si 7, 8 vaj 9

- Le Ionos si les anθ-i bar 7 phabajlinä, po 7 phabajança anθ-i sväko phabajlin.
- Sode phabaja si anθ-e kodola 7 phabajlinä?



Si 7 var po 7 phabaja, kadja:

$$7 \times 7 = 7 + 7 + 7 + 7 + 7 + 7 + 7 = 49$$

Amboldipen: 49 phabaja

$$8 \times 7 = ?$$

$$\begin{aligned} 8 \times 7 &= 7 \times 7 + 7 = \\ &= 49 + 7 = \\ &= 56 \end{aligned}$$

$$9 \times 7 = ?$$

$$\begin{aligned} 9 \times 7 &= 7 \times 7 + 7 + 7 = \\ &= 7 \times 7 + 2 \times 7 = \\ &= 49 + 14 = \\ &= 63 \end{aligned}$$

| | | | | | | | | | | |
|-----|---|----|----|----|----|----|----|----|----|----|
| 7 x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |

- Sode vojäqe/valinä thudeça si?



8 var po 8 vojäqe, kadja:

$$8 \times 8 = 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = 64$$

Amboldipen: 64 vojäqe / valinä

$$9 \times 8 = ?$$

Šaj te ginavav kadja:

$$\begin{aligned} 9 \times 8 &= 8 \times 8 + 8 = \\ &= 64 + 8 = \\ &= 72 \end{aligned}$$

Vaj kadja:

$$\begin{aligned} 9 \times 8 &= 5 \times 8 + 4 \times 8 = \\ &= 40 + 32 = \\ &= 72 \end{aligned}$$

| | | | | | | | | | | |
|-----|---|----|----|----|----|----|----|----|----|----|
| 8 x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |

- Svakone daj-kaxnä si la po 9 kaxnörä.
- Sode kaxnörä si?



Si 5 var po 9 kaxnörä, kadja:

$$5 \times 9 = 9 + 9 + 9 + 9 + 9 = 45$$

Amboldipen: 81 kaxnörä

• Utilizarindoj o čitro, phenen sode kaxnõrã si le 6 kaxnã. Tha` 8 kaxnã?

| | | | | | | | | | | |
|-----|---|----|----|----|----|----|----|----|----|----|
| 9 x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 75 | 81 | 90 |

Klasaqe butã!

1. Ginaven:

- a) 4×7 b) 5×8 c) 3×9 d) $4 \times 4 \times 4$
 7×5 8×7 6×9 $3 \times 3 \times 3$
 7×7 8×9 9×9 $4 \times 3 \times 3$

2. Arakhen e gina:

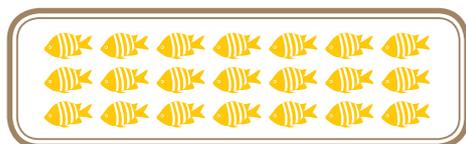
- a) 8-ça maj bare sar 5; 6; 8; b) 8 var maj bare sar 5; 6; 8!

3. Arakhen o prodùso maškar o gin 9 thaj svãko anθar e gina: 7; 4; 8; 3; 10!

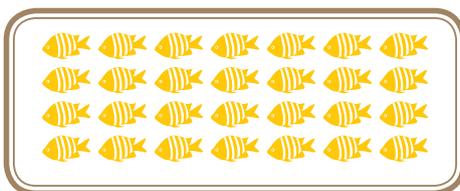
4. Arakhen i diferënca maškar e ginenqo prodùso 8 thaj 9 thaj e ginenqo prodùso 8 thaj 7!

5. Jekh sastrãri trebal te kerel po 5 tovera vaš 9 zene. Palal jekh vaxt vov kerdãs 27 tovera. Sode tovera maj si te kerel?

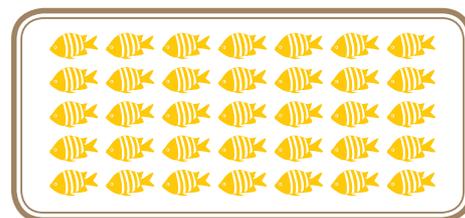
6. O Kornel, o Dobi thaj o Mihaj gele te astaren mačhen. Dikhen o čitro thaj ginaven sode mače astarde sarkon zeno?



Kornel



Dobi



Mihaj

10. O butãripen kana jekh anθar fãktorurã si 0, 1 vaj 10



Te palemdikhas!

$$\begin{array}{ll} 2 \times 1 = 2 & 6 \times 1 = 6 \\ 3 \times 1 = 3 & 7 \times 1 = 7 \\ 4 \times 1 = 4 & 8 \times 1 = 8 \\ 5 \times 1 = 5 & 9 \times 1 = 9 \end{array}$$

Sode kolivie si?



$$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 10 \times 1 = 10$$

Keren jekh čitro anθar savo te sikaven o butãripen 1×1 .



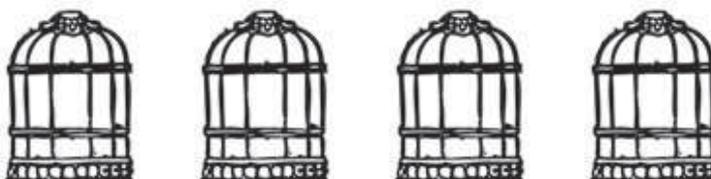
Inkeren godãθe!

Kana butãras jekh gin 1-ça, lias sar prodùso sakodova gin.

• Sode čiriklã si?

$$0 + 0 + 0 + 0 = 0$$

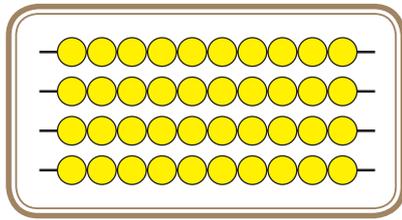
$$4 \times 0 = 0$$



Inkeren godãθe!

Kana jekh anθar e fãktorurã si 0, o prodùso si 0.

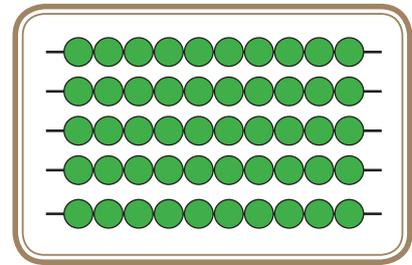
Dikhen o ćitro!



Sode galbena mirikle si?

$$10 + 10 + 10 + 10 = 40$$

$$4 \times 10 = 40$$



Sode zelena mirikle si?

$$10 + 10 + 10 + 10 + 10 + 10 = 60$$

$$6 \times 10 = 60$$

• Sode mirikle si anθ-o totalo?

10 var po 10 vaj:

$$10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = 100$$

$$10 \times 10 = 100$$



Inkeren gode!

Kana butaras jekh gin 10-a, aresas ka-jekh gin 10 var maj baro.

11. E butaripnasqi phal

| | | | | | | | | | | | |
|----|---|----|----|----|----|----|----|----|----|----|-----|
| x | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 0 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 0 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 0 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 0 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 0 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

Klasaqe buta!

1. Arakhen o rezultato svakone butaripnasqo, utilizisarindoj e butaripnasqi phal:

a) 4×7 b) 5×8 c) 6×5 d) 4×4 e) 7×8
 6×3 2×9 2×10 3×7 0×9

2. Arakhen e gina 5 var maj bare sar 5; 6; 9; 10!

3. Ginaven, thovindoj e trebutne faktorura:

a) $4 \times 5 \times 7$ b) $3 \times 7 \times 3$ c) $6 \times 5 \times 0$
 $5 \times 3 \times 2$ $2 \times 5 \times 8$ $2 \times 10 \times 3$

4. Arakhen:

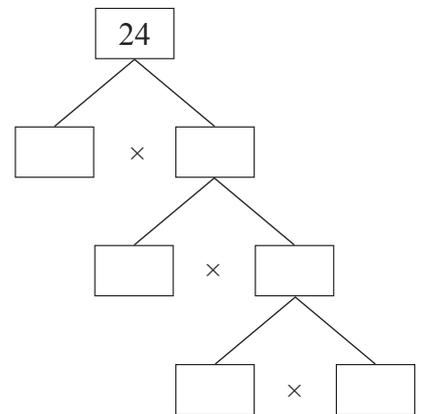
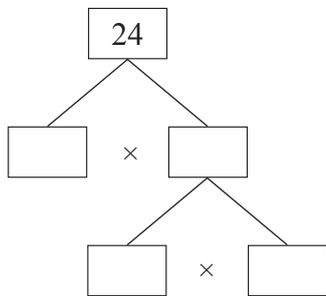
- a) i diferenca maskar o maj baro naturalo gin kerdo anθar 2 cifre thaj o produso e ginenqo 8 thaj 7!
b) i suma maskar o maj baro naturalo gin kerdo anθar jekh cifra thaj e ginenqo produso 10 thaj 0!

5. La Mihaela si la anθ-o totalo 72 mirikle. Voj dinās e panze amalenqe po 8 mirikle. Sode mirikle maj aχhile laqe?
6. Save maškar e avutne propozicie si ēace thaj save na si ēace?
- a) $4 \times 7 = 7 \times 4$
 b) $3 \times 7 \times 2 = 3 \times 10 = 8 \times 4$
 c) Ka-jekh butāripen duje faktorurenqa, kana jekh fāktoro si 0, o prodūso avela barabar kolavere faktoroqa.
 d) Kana jekh fāktoro si 1, o prodūso avela barabar kolavere faktoroqa.
7. La Ana si la 3 phrala. Sode banāne si te kinel lenqi māmi kaj te del sarkone ēhaves po 4 banāne?
8. Xramosaren o gin 42 sar:
- a) sūma 2 naturalone ginenqi; b) prodūso anθar 2 naturālo gina;
 c) sūma 3 naturalone ginenqi; d) prodūso anθar 3 naturālo gina!
9. Jekh rrom kerdās anθ-jekh dēs 3 mètrurā kārāmide. Sode mètrurā kārāmide kerel anθ-e 4 dēsā?
10. O Fernādo lačhardās pesqe lila p-e 3 rāfturā. P-o jekhto rāfto thovdās 4 lila, p-o dujto rāfto thovdās trinvar sode si p-o jekhto, haj p-o trinto rāfto 5 var maj but sar sode si p-o jekhto rāfto. Sode lila si le Fernandos?
11. Ka-e ginenqo 5 thaj 6 prodūso, kidāren e ginenqo 4 thaj 8 prodūso!
13. Komponisaren jekh problēma palal o ginavipen: $3 \times 7 \times 2 = ?$



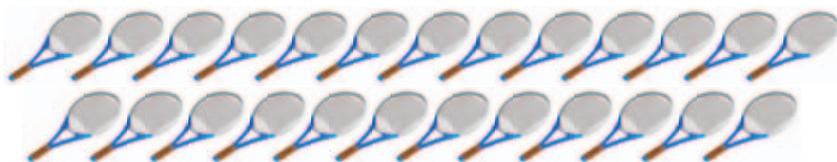
KHELIPEN!

Dikhen e avutne skēme. Ćitren anθ-e štartorre thaj pheren e štarigale e trebutne faktorurenqa. Keren buti anθ-e ekipe po štare kolegurenθar.

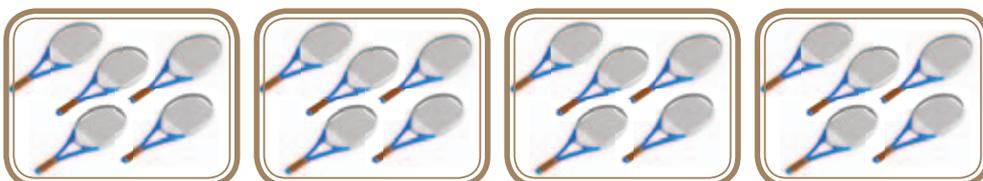


12. E ginavimatenqi keripnasqi òrdina

• Ka-jekh sportosqo klūbo sas 25 tenisosqe rakēte. O antrenòro maj kindās 4 kutie po panze tenisosqe raketenqa. Sode tenisosqe rakēte si akana?



25+



$$5 + 5 + 5 + 5 = 4 \times 5 = \frac{20}{45}$$

Dikhen sar e problemaqo rezolvisaripen si anθar jekh ginavipen:

$$25 + 5 + 5 + 5 + 5 = 25 + 4 \times 5$$

4 var po 5

$$= 25 + 20$$

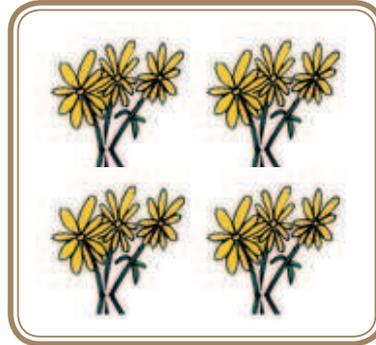
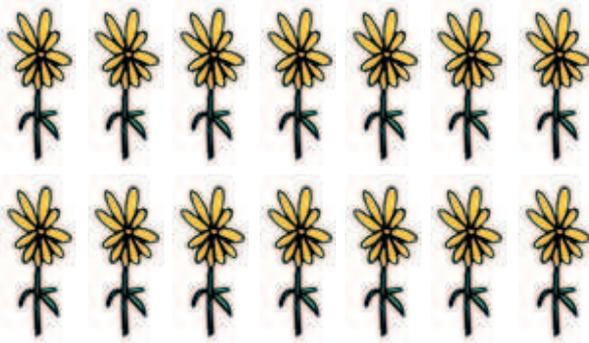
$$= 45$$



Inkeren godāθe!

Kodolesqe ke o butāripen arakhel pes anθar jekh palemkerdo kideripen, phenas ke o butāripen si jekh operācia dujtone ordinosqe, haj o kideripen si jekh operācia jekhtone ordinosqi.

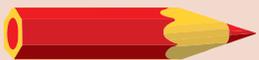
- Ka-jekh luludālin sasas 14 luludā. Bikinde pen 4 luludānqe vasta po 7 luludānqa. Sode luludā maj ačhile?



$$4 \times 3$$

Rezolvisaras anθar o ginavipen:

$$14 - 4 \times 3 = 14 - 12 = 2$$



Inkeren godāθe!

Anθ-jekh ginavipen anθ-e savo si jekhtone ordinosqe operācie thaj dujtone ordinosqe operācie, rezolvisaren pen maj anglal e dujtone ordinosqe operācie (o butāripen) thaj palal kodoja e jekhtone ordinosqe operācie (o kideripen thaj o tiknederipen).

Eksèmplo: $52 + 5 \times 3 - 16 = 50 + 15 - 16 =$
 $= 65 - 16 =$
 $= 49$

Interesānto!

Vi o tiknederipen si jekhtone ordinosqi operācia!



Klasaqe butā!

1. Ginaven mujutnes :

a) $4 + 7 - 5$

$7 - 5 + 12$

$9 + 7 - 11$

b) $5 \times 8 + 7$

$8 \times 7 - 40$

$6 \times 9 - 38$

c) $4 \times 5 \times 2$

$3 \times 7 \times 4$

$4 \times 1 \times 8$

2. Dikhen o modèlo thaj palal kodoja sikaven e ginavimatenqi keripnasqi òrdina anθ-e dine ginavimata:

$45 - 5 \times 8 + 7$

$\downarrow \quad \downarrow \quad \downarrow$
 $2 \quad 1 \quad 3$

a) $81 - 6 \times 5 + 11$

$78 - 5 \times 3 \times 2$

b) $6 \times 7 + 10 \times 4$

$8 \times 9 - 3 \times 10$

3. Ginaven:

a) $24 + 7 \times 2$

$57 - 5 \times 9$

$9 \times 6 - 11$

$8 \times 8 - 44$

b) $25 + 3 \times 8 - 47$

$88 - 5 \times 7 - 40$

$46 + 1 \times 9 - 30$

$73 - 2 \times 10 + 3$

c) $64 + 3 \times 5 + 2 \times 2$

$30 - 2 \times 7 + 3 \times 4$

$4 \times 8 + 5 \times 4 + 9$

$6 \times 6 + 5 \times 5 - 9 \times 5$

4. Xramosaren e avutne mangimata sar ginavipen thaj palal kodoja rezolvisaren len!

a) Kidāren o gin 18 e ginenqe produsoča 3 thaj 4!

b) Anθar o gin 86 ankalaven o dujvarno e ginesqo 8!

c) Arakhen i sùma maškar e ginenqo prodùso 9 thaj 6 thaj e ginenqo prodùso 7 thaj 4!

d) Sodeča si maj baro e ginenqo prodùso 6 thaj 5 sar e ginenqo prodùso 2 thaj 3?

5. O Fernàndo paruel e timbrurà pesqe amalença anθar o them. Lesqe star amala anθar o Bihòro biçalde lesqe sarkon zeno po 7 timbrurà, haj e 3 amala anθar o Ôlto biçalde lesqe sarkon zeno po 5 timbrurà. Sode timbrurà si akana le Fernandes?

• Xramosaren o rezolvisaripen sar jekh ginavipen!

6. Komponisaren jekh problèma palal o dino ginavipen:

$$5 \times 6 - 2 \times 3 = ?$$



KHELIPEN!

Thon anθa svàko starigalo o trebutno sèmno, kadjal kaj o rezultàto te avel áaço! Keren butì khethanes tumare kolegoça!

a) $3 \square 27 \square 3 = 27$

b) $6 \square 6 \square 6 \square 6 = 0$

c) $10 \square 10 \square 10 \square 20 = 70$

d) $9 \square 8 \square 6 \square 5 = 42$

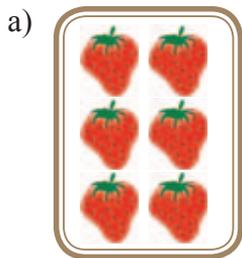


13. Evaluàcia

1. Xramosaren e palemkerde kiderimata sar butàrimata:

a) $5 + 5 + 5 + 5$; b) $8 + 8 + 8$; c) $15 + 15 + 15 + 15 + 15$.

2. Xramosaren e butàrimata reprezentisarde anθ-o svàko cítro.



3. Ginaven:

| | | |
|-----------------|-----------------|-----------------|
| a) 4×1 | b) 3×7 | c) 6×5 |
| 5×3 | 2×5 | 2×10 |
| 7×5 | 6×0 | 9×6 |
| 5×3 | 9×4 | 7×8 |

4. Arakhen:

- a) o gin 8 var maj baro sar 5;
- b) o trinvarno e ginesqo 6;
- c) i sùma maákar e ginenqo prodùso 3 thaj 9 thaj e ginenqo prodùso 5 thaj 4!

5. E siklòvne kidine 5 gone po 10 kuburença thaj 7 gone po 9 vurdonorrença. Sode khelnorre kidine anθ-o totàlo?

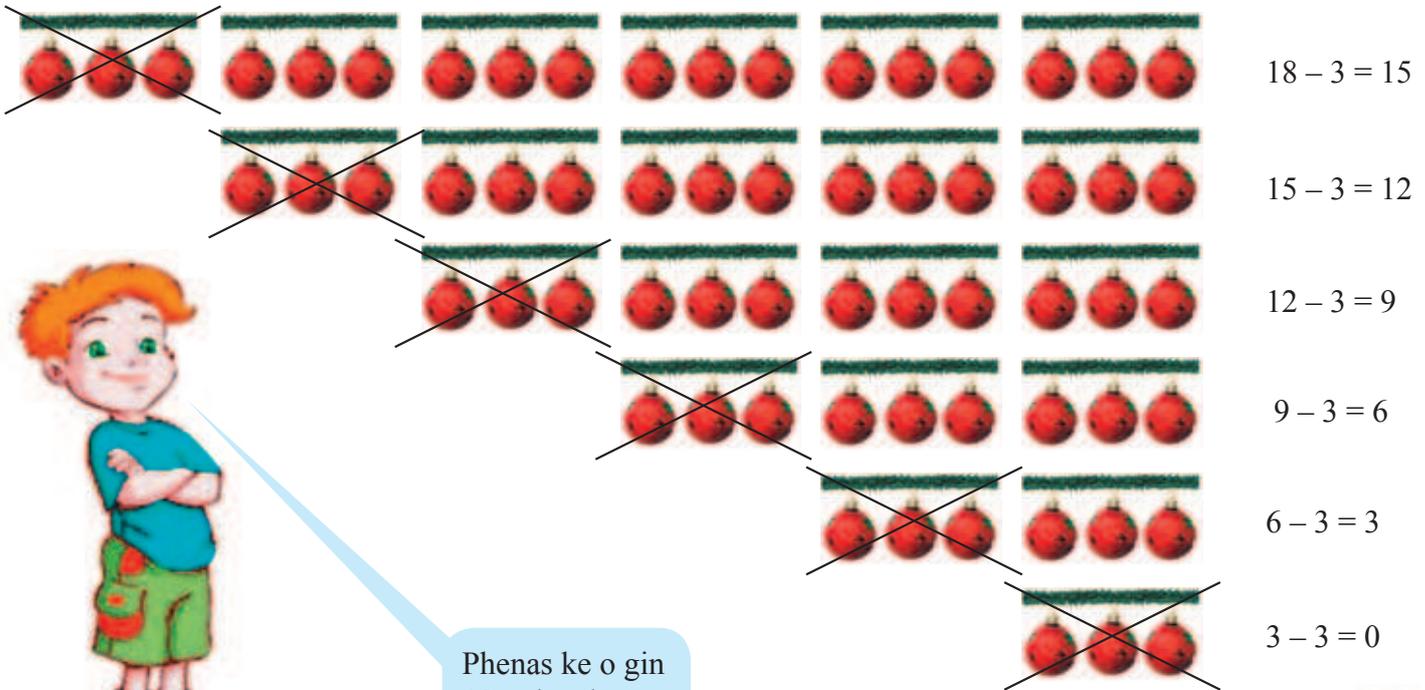
| Ìtemo | 1 | 2 | 3 | 4 | 5 |
|--------------|------------------------------|------------------------------|------------------------------|---------|--|
| Kalifikativo | | | | | |
| Dòsta | a vaj b vaj c | a vaj b vaj c | a vaj b vaj c | a | jekh puçhipen thaj jekh laço ginavipen |
| Mišto | (a, b); (b, c) vaj (a, c) | (a, b); (b, c) vaj (a, c) | (a, b); (b, c) vaj (a, c) | a, b | 2 puçhimata thaj 2 laçe ginavimata |
| But mišto | a, b, c | a, b, c | a, b, c | a, b, c | pherdo rezolvisaripen |



IV. O XULAVIPEN

1. O xulavipen e naturalone ginenqo utilizisarindoq o palemkerdo tiknederipen

- Kaj te xurāven o brādo, e čhave andine kheral 18 bradosqe glòburā. Von kamen te thon po 3 glòburā pa jekh ranik. Sode ranika xurāvena e andine globurença?

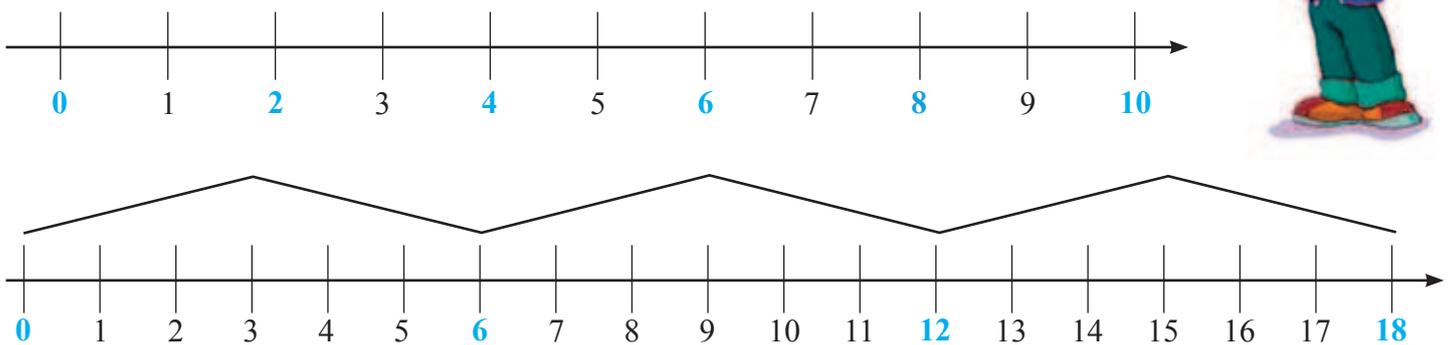


Phenas ke o gin 18 xulavel pes ekzākto k-o 3!

O 2 tiknederel pes anθar o 10, 5 var. Šaj te xramosaras: $10 : 2 = 5$



Anθar 18 glòburā lias pes 3 glòburā 6 var.



Klasaqe butā!

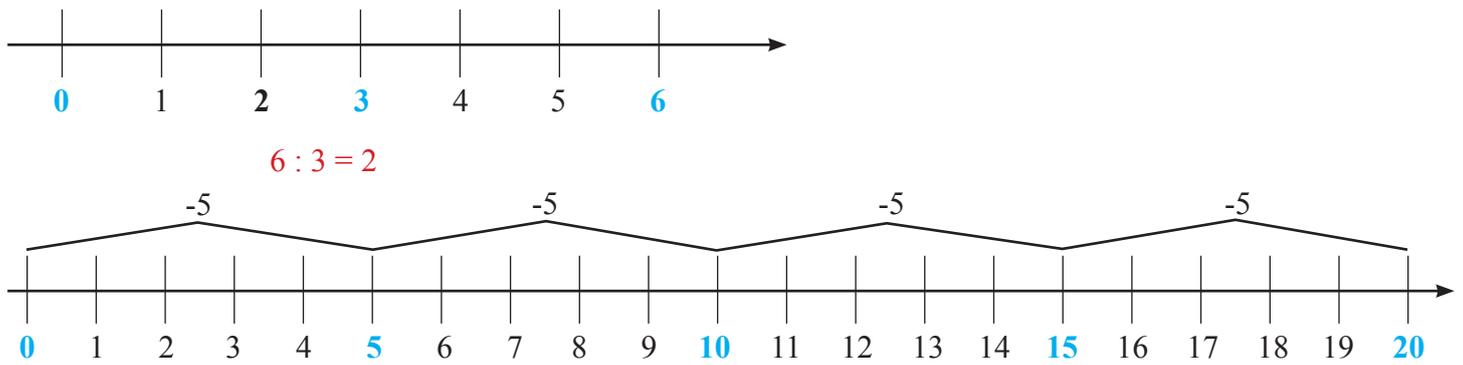
1. Ginaven anθar o palemkerdo tiknederipen sakodole ginesqo, sode papirurā trebal / kampil kaj te učharaven pen e bombòne!

a) po 4;

b) po 8.



2. Xramosaren e palemkerde tiknederimata reprezentisarde p-e ginenqi àksa sar xulavimata, palal o dino modèlo!



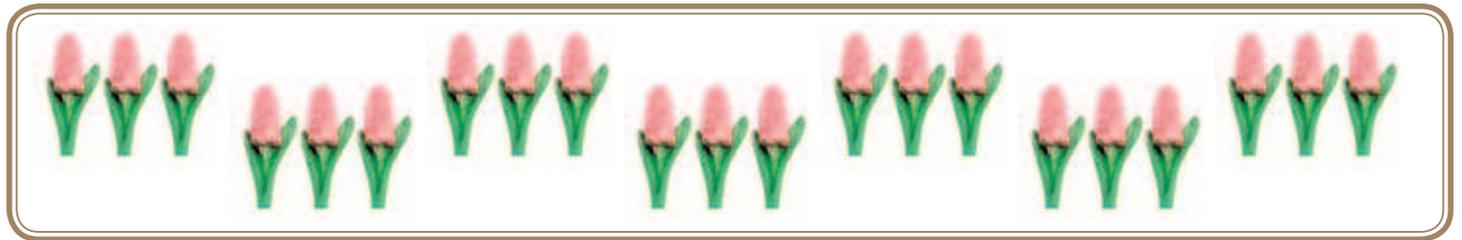
3. Xramosaren e palemkerde tiknederimata sar xulavimata thaj ginaven!

- a) $25 - 5 - 5 - 5 - 5 - 5 = 0$ b) $27 - 9 - 9 - 9 = 0$
 c) $36 - 6 - 6 - 6 - 6 - 6 - 6 - 6 = 0$ d) $24 - 8 - 8 - 8 = 0$

4. Xramosaren e palemkerde tiknederimata vaš e xulavimata, palal o dino modèlo!

- $6 : 2 = 3$ a) $9 : 3 = 3$ b) $70 : 10 = 7$ c) $16 : 4 = 4$
 $6 - 2 - 2 - 2 = 0$ $30 : 6 = 5$ $10 : 5 = 2$ $54 : 9 = 6$

5. I Oana kidàs 21 zambìle. Voj kamel te kerel luludànqe vasta po 7 zambilenθar. Sode luludànqe vasta kerela?



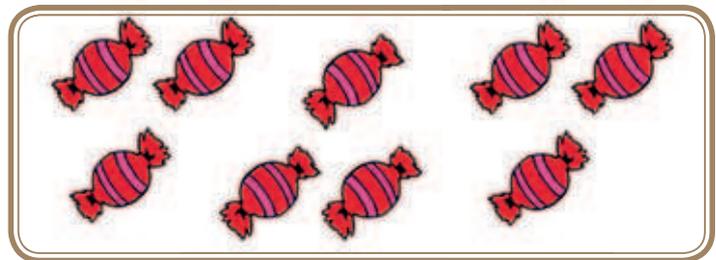
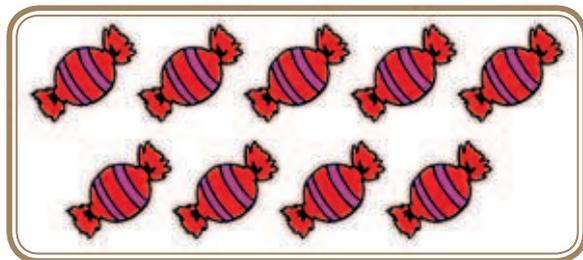
6. Jekh lolanzi kidàs 64 pendexa. Voj xal anθ-o svàko dēs po 8 pendexa. Sode pendexa maj ačhen laqe palal 5 dēsa? Ginaven anθ-e duj mòdurà!

2. O xulavipen – e butàripnasqi mamujutni operàcia

• La Alina si la jekh kutìa 9 bombonença. Voj del nište čhaven po 3 bombòne. Sode čhave xudena bombòne?

*Trinvar 3 bombòne, kadja $3 \times 3 = 9$.

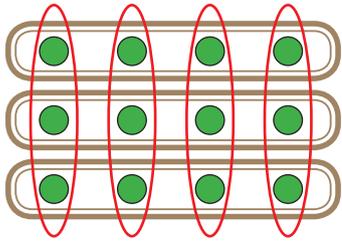
*Formisaren pen grùpe po 3 bombonenθar.



Formisarde pen 3 grùpe, dec šaj xramosarel pes:

$9 : 3 = 3$, kodolesqe kaj $3 \times 3 = 9$.

Dikhen i relacia maškar o butëripjen thaj xulavipjen:



$$3 \text{ var po } 4$$

$$3 \times 4 = 12$$

$$12 : 4 = 3$$



$$4 \text{ var po } 3$$

$$4 \times 3 = 12$$

$$12 : 3 = 4$$



Inkeren godăthe!

$$12 : 4 = 3$$

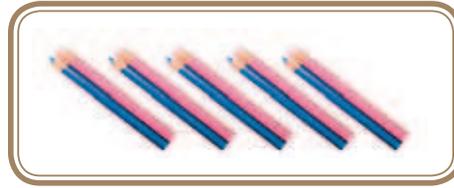
\downarrow \downarrow \downarrow
 xulavipnasqo gin xulavitòri kīto / o kozom

e xulavipnasqo gin = o gin savo xulavel pes
 o xulavitòri = o gin k-o savo xulavel pes
 o kīto / o kozom = e xulavipnasqo rezultàto

• **Te dikhas!**



10



$10 : 2 = 5$

$$2 \times 5 = 10$$

$$10 : 5 = 2$$

$$5 \times 2 = 10$$

$$10 : 2 = 5$$

• Keren jekh ćitro kaj te reprezentisaren e dine operacìe:

$$3 \times 4 = 12$$

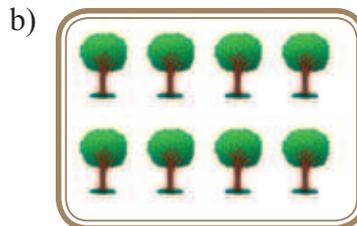
$$12 : 3 = 4$$

$$4 \times 3 = 12$$

$$12 : 4 = 3$$

Klasaqe bută!

1. Xramosaren e trebutne butërimata vaš e ćitre, palal kodoja arakhen e šajutne xulavipnasqe operacìe, utilizisarindoj o phandipjen maškar o butëripjen thaj o xulavipjen!



2. Arakhen e xulavimatenqo rezultàto, utilizisarindoj e butëripnasqi phal, sar anθ-o dino modèlo!

$$3 \times 6 = 18 \longrightarrow 18 : 6 = 3 \quad \text{vaj} \quad 18 : 3 = 6$$

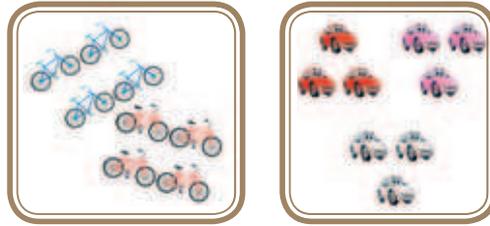
| | | |
|-------------------|--------------|--------------|
| $4 \times 6 = 24$ | $24 : 6 = ?$ | $24 : 4 = ?$ |
| $5 \times 7 = 35$ | $35 : 7 = ?$ | $35 : 5 = ?$ |
| $7 \times 9 = 63$ | $63 : 9 = ?$ | $63 : 7 = ?$ |
| $6 \times 8 = 48$ | $48 : 8 = ?$ | $48 : 6 = ?$ |

3. Le Andrejos si les 24 vurdonorre. Vov thol len anθ-e kutie anθar pesqi livni. Arakhen anθ-e sode kutie thovdās len, kana thovdās anθ-jekh kutia:

- a) 2 vurdonorre; b) 3 vurdonorre; c) 6 vurdonorre; d) 4 vurdonorre.

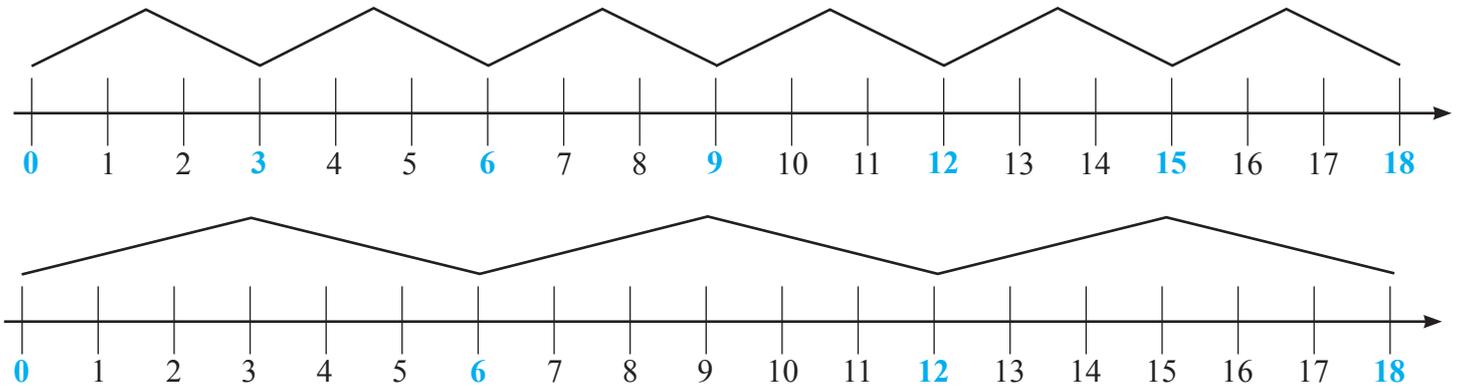
4. Xramosaren savorre butäripnasqe thaj xulavipnasqe ginavimata, utilisarindoj nùmaj kadala gina:

- a) 5; 4; 20 b) 3; 9; 27 c) 6; 7; 42



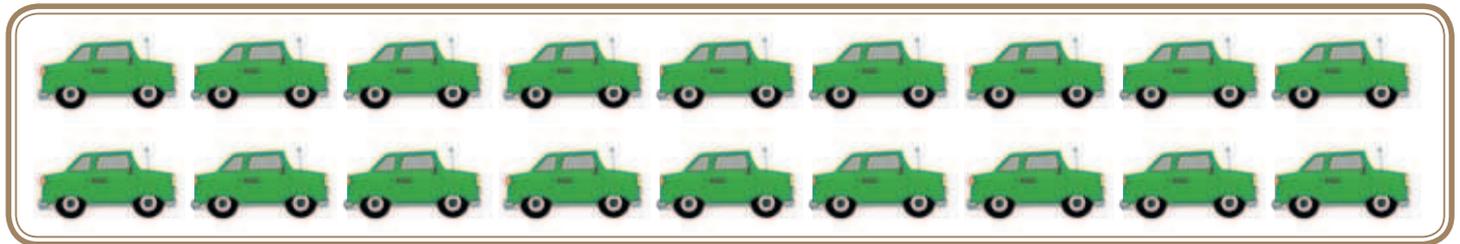
5. Dikhen e çitre! Vaś svàko çitro phenen po jekh problèma savi rezolvisarel pes anθar butäripen thaj jekh problèma savi rezolvisarel pes anθar xulavipen!

6. Xramosaren po jekh butäripnasqo ginavipen thaj i trebutni xulavipnasqi operàcia, utilisarindoj e àkse:

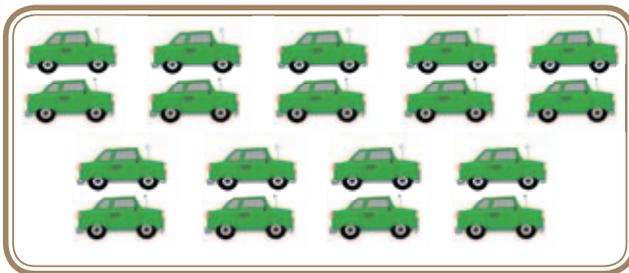


3. O xulavipen k-o 2. O xulavipen k-o 3

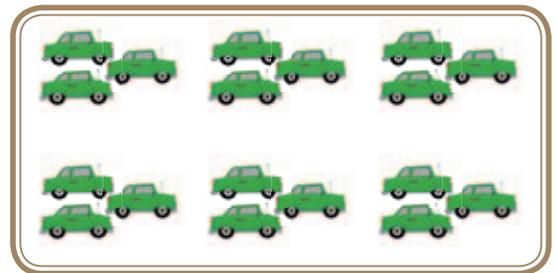
• Kaj te lien kotor ka-jekh aùtokonkurso, 18 vurdonorre xulavde pen:



a) po 2:



b) po 3:



* Sode ekipe formisarde pen?

$$18 : 2 = 9 \text{ kodolesqe ke}$$

$$9 \times 2 = 18$$

* Utilizarindoj e ginenqi àksa, ginaven:

$$12 : 2 = ?$$

* Sode ekipe formisarde pen?

$$18 : 3 = 6 \text{ kodolesqe ke}$$

$$6 \times 3 = 18$$

* Utilizarindoj e ginenqi àksa, ginaven:

$$12 : 3 = ?$$

• Ginaven e çerxenörră!



Sode çerxenörră si lole?

$$12 : 2 = 6$$



Inkeren godăthe!

Kana xulavas jekh gin k-o **2**, lias jekh gin dujvar maj tikno, anavărdo **i pàs** kodole ginesqi.

- Ginaven e ćerxenõrră!



Sode ćerxenõrră si anθar svăko rang? $12 : 3 = 4$



Inkeren godăthe!

Kana xulavas jekh gin k-o **3**, lias jekh gin trinvar maj tikno, anavărdo o **trinipen** anθar kodova gin.

| | | | | | | | | | | |
|------------|---|---|---|---|----|----|----|----|----|----|
| | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| : 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

| | | | | | | | | | | |
|------------|---|---|---|----|----|----|----|----|----|----|
| | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| : 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Klasaqe bută!

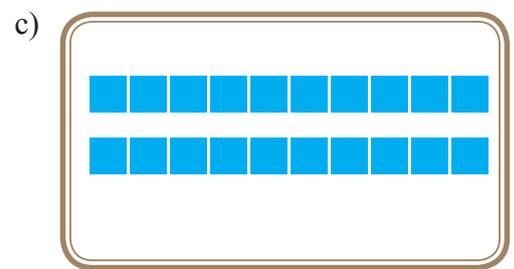
1. Xramosaren e trebutne butărimata vaš e ćitre, palal kodoja arakhen e šajutne xulavipnasqe operăcie, utilizisarindoj o phandipen maškar o butăripen thaj o xulavipen!



$12 : 3 = ?$



$10 : 2 = ?$



$20 : 2 = ?$

2. Xramosaren e trebutne xulavimata vaš svăko palemkerdo tiknederipen!

- a) $12 - 3 - 3 - 3 - 3 = 0$ b) $18 - 3 - 3 - 3 - 3 - 3 - 3 = 0$
 c) $24 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 = 0$

3. Ginaven, utilizisarindoj o phandipen e butăripenača!

- a) $6 : 3 = ?$ b) $9 : 3 = ?$ c) $10 : 2 = ?$ d) $14 : 2 = ?$
 $2 : 1 = ?$ $30 : 3 = ?$ $16 : 2 = ?$ $24 : 3 = ?$

4. Arakhen e gina dujvar maj tikne sar: 6; 8; 16!

5. Arakhen e gina trinvar maj tikne sar: 6; 12; 27!

6. Anθ-jekh berš si 12 čhona, haj anθ-jekh trimèstro si 3 čhona. Sode trimèstrură si anθ-jekh berš?

7. Jekh derāvāri bešlās p-i derāv jekh pās berš. Arakhen sode čhona bešlās p-i derāv!

8. La Klaudia si la 24 angarne, le Mihajos si les dujvar maj cīra sar la Klaudia, haj le Aleksandros si les trinvar maj zāla(ga) sar le Mihajos. Sode angarne si len khethanes?

9. Xramosaren anθ-e štartorre thaj pheren e štārigale e semnoča $\square \times$ vaj $\square \div$, kaj te aresel pes ka-e čāce propozicie.

a) $6 \square 3 = 18$ b) $9 \square 3 = 3$ c) $10 \square 2 = 20$

$2 \square 1 = 2$ $30 \square 3 = 10$ $16 \square 2 = 8$

4 O xulavipen k-o 4. O xulavipen k-o 5

• 20 čhavorre zan k-i bibliotēka.



Te arakhas:

a) Sode sinie pherena, kana bešena po 4 k-i sinia?

$$20 : 4 = 5, \text{ kodolesqe ke}$$

$$5 \times 4 = 20$$

Amboldipen : 5 sinie

b) Kana bešena barabar k-e 5 sinie, sode čhavorre avena k-i svāko sinia?

$$20 : 5 = 4, \text{ kodolesqe ke}$$

$$4 \times 5 = 20$$

Amboldipen : 4 čhavorre

• E 16 ambrola sas xulavde egalone čhāndesθe p-e 4 čare. Sode ambrola si pa jekh čaro?



$$16 : 4 = 4$$

O gin 4 si 4 var maj tikno sar o gin 16.



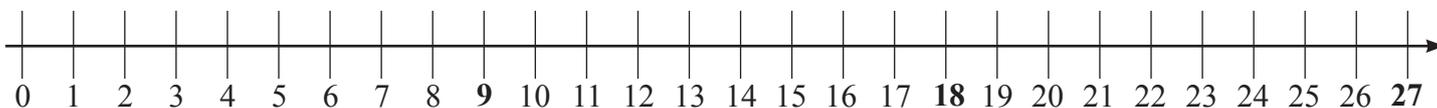
Inkeren godāθe!

Kana xulavas jekh gin k-o 4 aresas kaj jekh gin 4 var maj tikno, anavārdo firtāri/sfērto/štāripen.

• Utilizarindoj e ginenqi āksa kaj te arakhas e dine xulavimatenqo kīto/kozom.

$$16 : 4$$

$$25 : 5$$



• Utilizarindoj o phandipen maškar o butāripen thaj o xulavipen, arakhen e xulavimatenqo kīto/kozom.

$$8 \times 5 = 40 \quad 40 : 5 = ?$$

$$10 \times 4 = 40 \quad 40 : 4 = ?$$

| | | | | | | | | | | |
|------------|---|---|----|----|----|----|----|----|----|----|
| | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| : 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

| | | | | | | | | | | |
|------------|---|----|----|----|----|----|----|----|----|----|
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| : 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Dikhen!

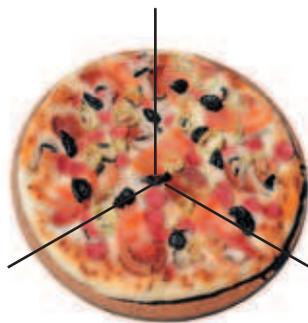
• Anθ-e sode kotora sas çhindi i pizza? Sar si e kotora?

a)



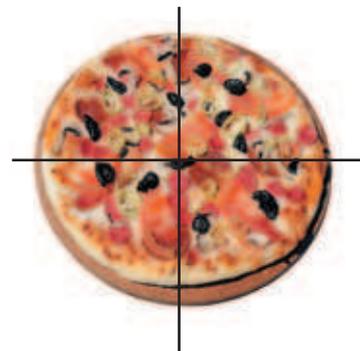
O dujpen (i paš) si jekh kotor anθar jekh savorro, savo si xulavdo anθ-e duj egàlo riga.

b)



O trinipen si jekh kotor anθar jekh savorro, savo si xulavdo anθ-e trin egàlo riga.

c)



O štaripen/firtàri si jekh kotor anθar jekh savorro, savo si xulavdo anθ-e štar egàlo riga.

• Phenen savo kotor anθar o dreptungio sas rangàrdo anθ-i svàko situàcia!

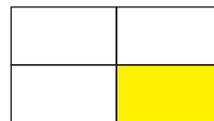
a)



b)



c)



Klasaqe bută!

1. Ginaven, utilizisarindoj o phandipen maškar o butàripen thaj o xulavipen.

- a) $20 : 4 = ?$ b) $10 : 5 = ?$ c) $16 : 4 = ?$
 $28 : 4 = ?$ $30 : 5 = ?$ $40 : 5 = ?$
 $36 : 4 = ?$ $50 : 5 = ?$ $5 : 5 = ?$

2. Arakhen e ginenqo firtàri/firtàri: 16; 8; 20; 32.

3. Arakhen:

- a) e gina 5-ça maj tikne sar: 10; 30; 45.
b) e gina 5 var maj tikne sar: 10; 30; 45.

4. Anθ-e spektakulurenqi sàla si 28 çhave. Kaj te lien kotor ka-o spektàkulo, trebal te keren ekipe anθar 4 çhave. Sode ekipe kerde e çhave?

5. Xramosaren anθ-e šartorre thaj palal kodoja pheren e kasète e trebutne ginença kaj te aresel pes ka-e çáce propozicie!

- a) $6 \square 3 = 18 : 1$ b) $9 \square 3 = 3 \times 3$ c) $10 \square 2 = 20 : 1$
 $4 \square 1 = 2 \times 2$ $30 \square 3 = 2 \times 5$ $\square : 2 = 18 : 3$

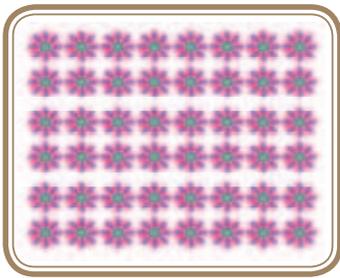
5. O xulavipen k-o 6. O xulavipen k-o 7

- I Parni sar o Iv kidās anθar o veś 42 mūre.
Voj thol po 6 mūre anθ-jekh sevlī.
Sode sevlā trebal laqe?
 $42 : 6 = 7$, kodolesqe ke $7 \times 6 = 42$

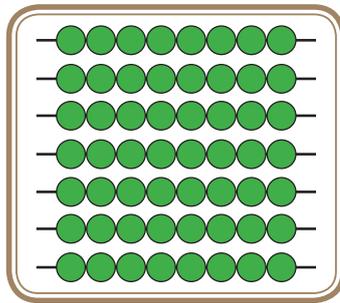


- I Parni sar o Iv xulavel e 7 tiknorrenqe barabare čhandesoe e 42 mūre.
Sode mūre xudel sarkon xurdorro?
 $42 : 7 = 6$, kodolesqe ke $6 \times 7 = 42$.

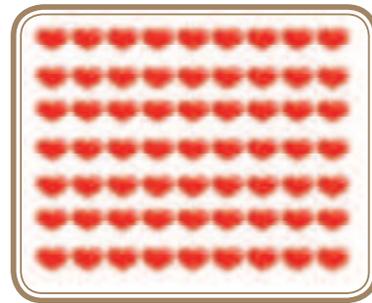
- Utilizarindoj e čitre thaj i relācia e butāripnača, arakhen e xulavimatenqo kīto?



$48 : 6 = ?$

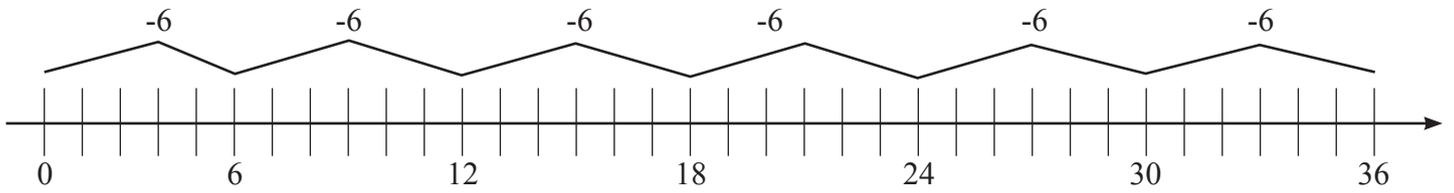


$56 : 7 = ?$



$63 : 7 = ?$

- **Dikhen** e ginenqi āksa thaj **arakhen** e xulavimatenqo kozom/kīto!



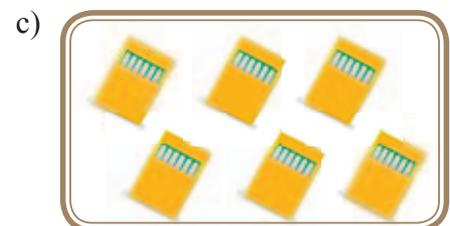
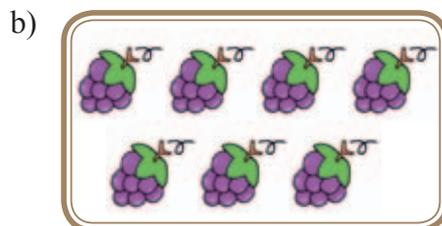
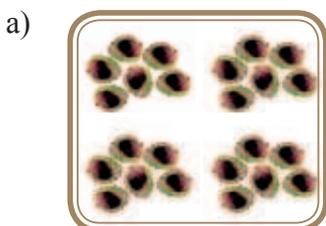
$30 : 6 = ?$ $24 : 6 = ?$ $18 : 6 = ?$ $36 : 6 = ?$

| | | | | | | | | | | |
|----|---|----|----|----|----|----|----|----|----|----|
| | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| :6 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

| | | | | | | | | | | |
|----|---|----|----|----|----|----|----|----|----|----|
| | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| :7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Klasaqe butā!

1. Xramosaren e trebutne butārimata vaś e čitre thaj e xulavimata save thavden anθar kadala butārimata!



2. Sode var arakhel pes o 7 anθ-o svàko anθar e gina: 7; 14; 35; 49; 63!

3. E xulavipnasqo gin si 56, haj o xulavitòri si 6. Arakhen o kito/o kozom!

4. Ginaven:

a) $20 : 4 \times 6$ b) $6 \times 7 : 3$ c) $49 : 7 \times 6$
 $28 : 7 \times 3$ $30 : 5 \times 7$ $50 : 5 \times 7$

5. Anθ-e duj egàlo/barabar kutie are sen 14 kilogràmurà kirèse. Sode kutie sa kodova tiposqe si trebutne kaj te thon pen 56 kilogràmurà kirèse?

6. Phenen kana e kadala propozicie si éacé vaj na:

a) $6 + 5 = 5 + 6$ b) $49 - 7 = 7 - 49$
c) $7 \times 3 = 3 \times 7$ d) $30 : 6 = 6 : 30$

7. O Viktor rezolvisardàs 24 ginavimata, o Mihaj kerdàs 6 var maj cira sar o Viktor, haj i Alina, 7 var maj but sar o Mihaj.

- Thon o puçhipen thaj rezolvisaren i problèma!
- Komponisaren jekh problèma anθ-i savi te utilizisaren e alava "6 var maj but" thaj "6 var maj xanci/zàla"!

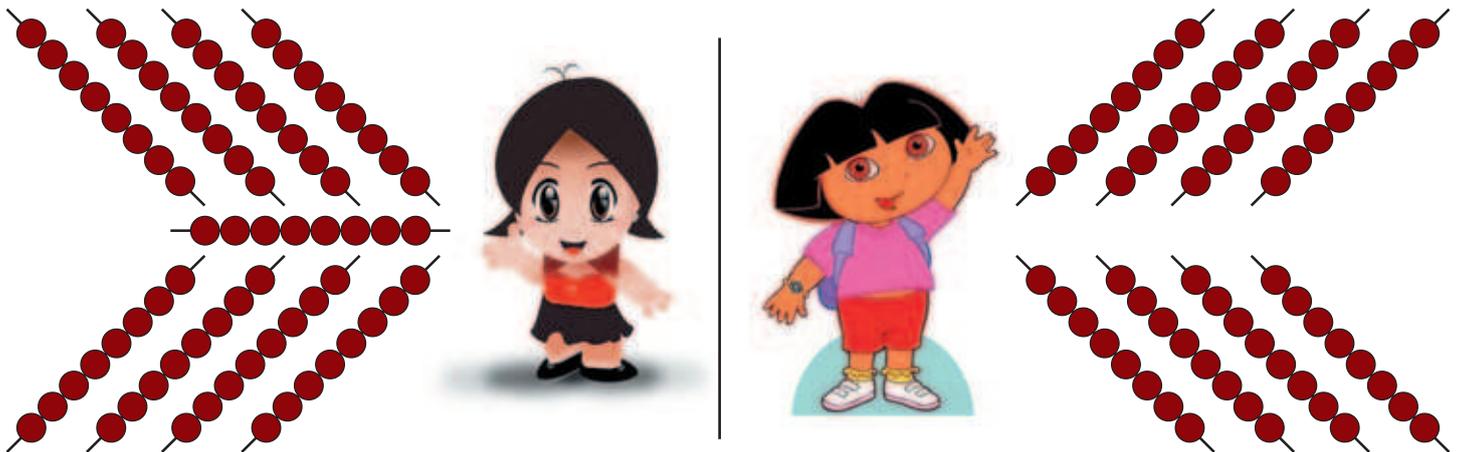
8. I Ana kidàs 25 tuliphanda, haj i Laura, 20 tuliphanda. E çhaja kamen te keren luludånqe vasta 5 tuliphandença. Sode luludånqe vasta kerena khethanes?

9. Xramosaren xulavipnasqe operàcie save den o kito 4!

10. Dikhen e telutne gina. Xramosaren so maj but xulavipnasqe ginavimata, utilizisarindoj kadala gina!

| | | | | | | |
|----|----|---|---|----|---|----|
| 48 | 12 | 4 | 6 | 36 | 7 | 28 |
|----|----|---|---|----|---|----|

6. O xulavipen k-o 8. O xulavipen k-o 9



$72 : 8 = 9$, kodolesqe kaj $9 \times 8 = 72$

$72 : 9 = 8$, kodolesqe ke $8 \times 9 = 72$

- Savi çhaj pherdàs maj but dorà? Sosθar?

Dikhen!

$56 : 8 = ?$
 $7 \times 8 = 56$, dec
 $56 : 8 = 7$

Arakhela pes o kito/o kozom, utilizisarindoj i relàcia e butàripnaça.

$63 : 9 = ?$
 $63 : ? = 9$
 $63 : 7 = 9$, dec
 $63 : 9 = 7$

Arakhela pes o kito/o kozom, utilizisarindoj e siklile xulavimata.



Inkeren godăthe!

E butäripnasqi pròba

$8 \times 5 = 40$

• anθar butäripen $5 \times 8 = 40$

• anθar xulavipen $40 : 5 = 8$

$40 : 8 = 5$

E xulavipnasqi pròba

$45 : 9 = 5$

• anθar xulavipen $45 : 5 = 9$

• anθar butäripen $5 \times 9 = 45$

$9 \times 5 = 45$

| | | | | | | | | | | |
|------------|---|----|----|----|----|----|----|----|----|----|
| | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| : 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

| | | | | | | | | | | |
|------------|---|----|----|----|----|----|----|----|----|----|
| | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| : 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Klasaqe butä!

1. Xramosaren e palemkerde tiknederimata sar xulavimata!

a) $24 - 8 - 8 - 8 = 0$ b) $48 - 8 - 8 - 8 - 8 - 8 - 8 - 8 = 0$

$36 - 9 - 9 - 9 - 9 = 0$ $27 - 9 - 9 - 9 = 0$

2. Ginaven thaj éacären o amboldipen, utilizisarindoj o butäripen!

a) $36 : 9$ b) $56 : 8$ c) $81 : 9$

$16 : 8$ $45 : 9$ $72 : 8$

3. Arakhen sode var arakhel pes o gin 9 anθ-e svàko maškar e gina: 27; 45; 63; 90!

4. Karing e gina 32; 48; 64 thaj 80, phenen save gina si:

a) 8-ça maj bare; b) 8-ça maj tikne; c) 8 var maj tikne.

5. E xulavipnasqo gin si 63, haj o xulavitòri si o maj baro naturàlo gin xramosardo jekhe cifraça. Arakhen o kito!

6. Kaj jekh škòla sas andine 52 pakèturà biskvuiturença. Anθ-o jekhtho dës sas dine le çhavenqe 20 pakèturà, haj anθ-o dujto dës kolaver biskvuiturà sas xulavde ka-e 8 çhave. Sode pakèturà biskvuiturença xudàs sarkon çhavo anθ-o dujto dës?

7. Kaj jekh bikinlin bikinde pen anθ-jekh dës maj but fälurà frukturenqe.

• Dikhen anθ-o telutno tabèlo thaj ambolden kaj kadala puçhimata:

a) Sode var si maj bari e bananenqi bikindi kantitèta sar e phabajenqi kantitèta?

b) Savi si i diferènca maškar e bananenqi bikindi kantitèta thaj e portokalenqo koboripen?

• Utilizisarindoj e datè anθar o tabèlo, thon aver puçhimata thaj palal kodoja rezolvisaren.

| | |
|-----------|----------------|
| banàne | 64 kilogràmurà |
| portokàle | 48 kilogràmurà |
| phabaja | 8 kilogràmurà |
| kilava | 32 kilogràmurà |

8. I Aleksàndra cítiràdàs 45 trandafirurà, i Kamèlia, 9-ença maj xanci/cìra sar i Aleksàndra, haj i Natàlia, 9 var maj cìra sar i Aleksàndra.

• Thon jekh puçhipen thaj rezolvisaren i problèma!

7. Speciàlo xulavipnasqe kèzură

- **Dikhën** e çitre thaj phenen sode morkoja xudel sarkon šošojorro.



$3 : 3 = 1$, sosθar ke $1 \times 3 = 3$

Inkeren godăθe!

Orsavo gin xulavdo peça del o kito 1.



$3 : 1 = 3$, sosθar kaj $3 \times 1 = 3$

Inkeren godăθe!

Kana xulavas jekh gin k-o 1, del o rezultato sakodova gin.



$0 : 3 = 0$, sosθar ke $0 \times 3 = 0$

Inkeren godăθe!

O zèro xulavdo k-e orsavo gin del o kito 0.



$3 : 0 = ?$

Inkeren godăθe!

Na si nijekh gin savo te avel butărdo e 0-ça. te Deç, o xulavipen k-o 0 na si les sènso.

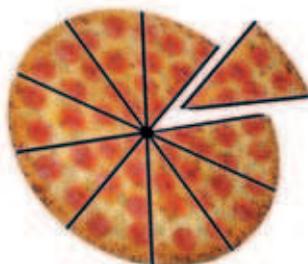
- Ka-e Čhavesqo Dives, xulavdăš barabaresθe 80 mariklă k-e 10 škòle. Sode mariklă xudăš jekh škòla?

$80 : 10 = 8$, sosθar ke $8 \times 10 = 80$

Inkeren godăθe!

Kana xulavas jekh gin k-o 10, aresas ka-jekh gin 10 var maj tikno.

- **Arakhen** o gin 10 var maj tikno sar o 10!



I pizza sas xulavdi anθ-e 10 egàlo/sajekh kotora. Me xav jekh anθar kadala kotora.



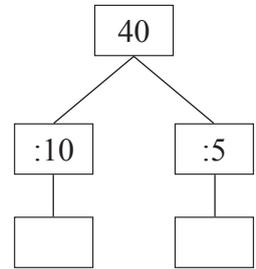
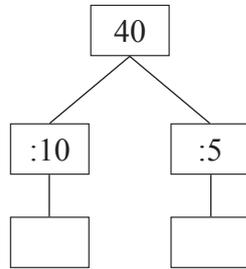
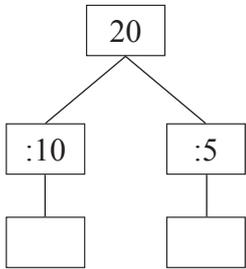
- Kaj te liel pes i dešto rig, i pizza sas xulavdi anθ-e 10 egàlo/barabar kotora.
- **O dešipen** si jekh kotor anθar jekh savorro/sasto kotor savo sas xulavdo anθ-e 10 egàlo kotora.

Klasaqe bută!

1. Arakhen e xulavimatenqo kito! Keren i verifikacia anθar o butāripen!

- a) $6 : 1$ b) $9 : 9$ c) $30 : 10$ d) $0 : 2$
 $8 : 1$ $5 : 5$ $70 : 10$ $0 : 6$

2. Xramosaren anθ-e štartorre thaj pheren e kherorre e trebutne ginença!



3. Arakhen e gina 10 var maj tikne sar: 30; 50; 70; 90!

4. Savo gin, maj baro sar 10 thaj maj tikno sar 40, xulavel pes ekzākto k-o 2, k-o 4, k-o 5 thaj k-o 10?

5. Ginaven:

- a) $30 : 10 : 3$ b) $30 : 10 : 1$ c) $10 : 10 : 1$
 $70 : 10 : 7$ $70 : 10 : 1$ $10 : 10 \times 1$

6. I Maria kindās kaθar jekh libraria 5 paramicēnqe lila thaj 5 var maj zāla matematikaqe kidimata. Sode lila kindās anθ-o totālo i Maria?

7. Xramosaren po 3 xulavipnasqe ginavimata save den o kozom!

- a) 1; b) 6; c) 0; d) 10.

8. Xramosaren anθ-e štartorre thaj palal kodoja pheren e kherorra e semnoça “ \times ” vaj “ $:$ ”, kaj te aresel pes ka-e éaće propozicie.

- a) $7 : 1 = 1$ 7 b) $0 \times 0 = 5$ 0 c) 6 $0 = 0$ 6
 $60 : 10 = 6$ 1 $49 : 7 = 7$ 1 40 $4 = 90$ 9

9. Maj but éhave kidine anθar jekh pherelin 80 kilogrāmura kilava, save thovde len anθ-e kutie po deše kilogramura. Vaš o bikinipen, e kilava anθar svāko kutia sas thovdine anθ-e gonorre po duje kilogramura. Sode gonorre trebal kaj te thon pen e kilava anθar 5 kutie? Tha' kaj te aven thovdine savorre kilava?

9. E xulavipnasqi phal

1. Vaš svāko prodūso, xramosaren duj trebutne xulavimata, palal o modēlo:

$$4 \times 9 = 36 \qquad 36 : 9 = ?$$

$$\qquad \qquad \qquad 36 : 4 = ?$$

- a) 4×6 b) 9×7 c) 7×6 d) 8×6
 7×5 5×4 3×7 9×5

2. Ginaven:

- a) $20 : 5$ b) $27 : 3$ c) $49 : 7$ d) $40 : 8$
 $28 : 7$ $63 : 9$ $50 : 10$ $48 : 6$

3. Xramosaren e trebutne operàcie vaś save o gin 8 te avel:
- a) duje ginenqi diferença; b) duje ginenqo prodùso;
c) duje ginenqi sùma; d) duje ginenqo kïto.
4. Xramosaren savorre butäripnasqe thaj xulavipnasqe operàcie, utilizisarindoj e avutne gina:
- a) 5; 45; 9; b) 9; 63; 7; c) 8; 9; 72; d) 6; 60; 10
5. Vaś jekh sportosqo konkurso, e çhave beśen anθ-e 6 rëndurä. P-o sväko rëndo si po 5 çhave. Von trebal te keren truja anθar po 10 çhave. Sode truja śaj te formisaren?
6. Anθ-jekh luludänqo vast si 32 luludä. Jekh firtäri anθar lenθe si tuliphanda. Zambile si dujvar maj cïra, haj e kolaver si narcise. Sode narcise si anθ-e luludänqo vast?



KHELIPEN!

Dikhen o tabëlo! So ginavimata śaj te xramosaren e telutne ginença:

- utilizisarindoj xulavimata save den o kozom maj tikno sar 6;
- utilizisarindoj xulavimata save den o kozom maśkar 4 thaj 8!

| | | |
|----|----|----|
| 6 | 9 | 42 |
| 35 | 8 | 7 |
| 32 | 5 | 24 |
| 4 | 36 | 12 |

10. O arakhipen e biprinzarde termenosqo

- La Alina thaj la Kristina si len po 27 çerxenörrä. I Alina thovdäs savorre çerxenörrä anθ-jekh kutia, haj i Kristina thovdäs po 9 çerxenörrä anθ-e maj tikne kutie. Sode kutie utilizisarel i Kristina?

Ginavasa anθar **zumavimata**.

$$a \times 9 = 27$$



$$1 \times 9 = 9; \quad 9 < 27$$



$$2 \times 9 = 18; \quad 18 < 27$$



$$3 \times 9 = 27; \quad 27 = 27$$

Amboldipen: 3 kutie

- **Dikhen** k-e ginavipnasqo mòdo!

$$a \times 5 = 30$$

$$a = 30 : 5$$

$$a = 6$$

Arakhen!

$$4 \times 6 = 24$$

$$24 : 6 = 4$$

$$a \times 6 = 24$$

$$a = 24 : 6$$

$$a = 4$$

O biprinzardo gin śaj te arakhel pes kerindoj i pròba anθar o xulavipen.



- Anθ-o gono si sakodoja aresqi kantitèta sar si anθ-e kodola 3 pakète. Sode aro si anθ-o gono?



$$\begin{aligned} a : 3 &= 4 \\ a &= 4 \times 3 \\ a &= 12 \end{aligned}$$

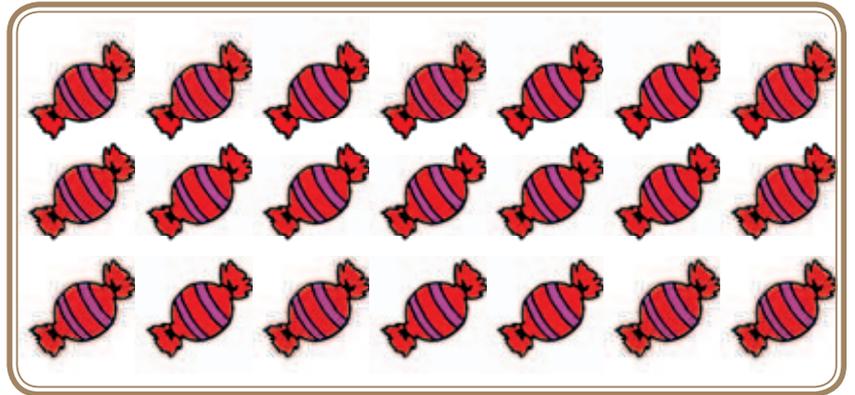
Arakhen!

$$\begin{aligned} 18 : 9 &= 2 \\ 2 \times 9 &= 18 \end{aligned}$$

$$\begin{aligned} a : 9 &= 2 \\ a &= 2 \times 9 \\ a &= 18 \end{aligned}$$

- Ka-jekh magazino si pakète anθ-e save si 15, 18 thaj 21 bombòne. Savo pakèto trebal te kinel i daj kaj te del le 3 çhavenqe po 7 bombòne?

$$\begin{aligned} a : 3 &= 7 \\ 15 : 3 &= 5 & 5 < 7 \\ 18 : 3 &= 6 & 6 < 7 \\ 21 : 3 &= 7 \end{aligned}$$



Amboldipen: 21 bombòne

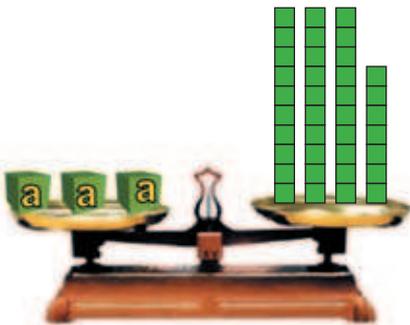
Klasaqe bută!

- Maşkar e gina 6; 9; 12, alosaren i trebutni valòra vaş svàko grafèma, palal o dino modèlo!

$$a \times 2 = 18 \quad 6 \times 2 = 18 \text{ na si çáces; } \quad 9 \times 2 = 18 \text{ si çáces; } \quad \text{deç } a = 9$$

$$a \times 4 = 36 \quad 5 \times b = 30 \quad c : 2 = 6$$

- Dikhen e tolă, xramosaren e trebutne ginavimata thaj arakhen o biprinzardo gin!



- Xramosaren anθ-e ştatorre thaj pheren e tabèlură!

a)

| | | | | | |
|-------|----|----|----|----|----|
| a | 6 | | 8 | | 4 |
| b | | 9 | | 7 | |
| a × b | 54 | 36 | 40 | 28 | 20 |

b)

| | | | | | |
|-------|----|---|---|----|----|
| a | 36 | | | 27 | 42 |
| b | | 9 | 8 | | |
| a : b | 4 | 6 | 8 | 3 | 7 |

- Godşardem man ka-jekh gin, butărdem les 8-ça thaj areslem k-o 72. Save ginesθe godşardem man?

- O Kornel godşardăş pes ka-jekh gin, xulavdăş les k-o 7 thaj areslăş k-o 8. K-o savo gin godşardăş pes o Kornel?

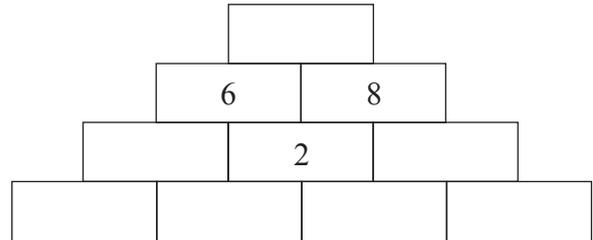
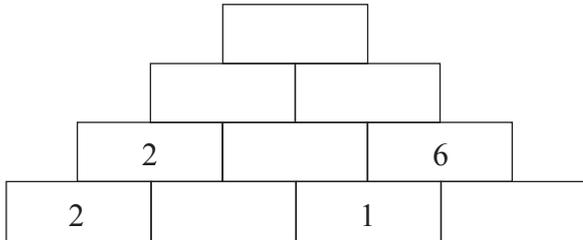
- Komponisaren kasave ginavimata thaj mangel e kolegurenqe te rezolvisaren len!

6. Jekh baro kùbo si kerdo anθar 8 tikne kùbură. Utilizisarindoj tikne kùbură, i Ionela vazdăs 6 bare kùbură, haj o Ștefan, 8 bare kùbură. Sode tikne kùbură utilizisarde e çhave anθ-o totălo?



KHELIPEN!

Anθ-o svăko kherorro xramosarel pes o prodùso e duje ginenqo arakhle anθ-e kherorra save si telal. Arakhen e gina save nana-i!
Keren buti anθ-e grùpe duje zenenqe!



11. E ginavimatenqi keripnasqi òrdina thaj o utilizisaripen e rotalone parantezenqo

• I Mihaela pherdăs anθ-jekh albùmo 10 patrină pozença. Voj maj xudăs 28 pòze save thovdăs len po 4 p-jekh patrin. Sode patrină si pherde akana?

1. Sode patrină maj pherdăs?
 $28 : 4 = 7$
2. Sode patrină si pherde akana?
 $10 + 7 = 17$
Amboldipen: 17 patrină

Rezolvisaripen anθar ginavipen:
 $10 + 28 : 4 = 10 + 7 = 17$

Vì o xulavipen si jekh dujtone ordinosqi operàcia!



Inkeren godăθe! O butăripen thaj o xulavipen si dujtone ordinosqe operàcie.

- Ka-jekh khelnorrenqo magazino andăs pes 70 khelnorre. Bikinde pen 20 khelnorre, haj e kolaver sas thovde po 5 pa jekh ràfto. Sode ràftură sas utilizisarde?
- **Dikhen** k-e rezolvisarimata kerde e Alinaθar thaj Kristianosθar!

1. Sode khelnorre açhile?
 $70 - 20 = 50$
2. Sode ràftură sas utilizisarde?
 $50 : 5 = 10$
Amboldipen: 10 ràftură

Rezolvisardem i problèma anθar jekh ginavipen.

$70 - 20 : 5 = 70 - 4 = 64$
Amboldipen: 64 ràftură

• Savo çhavo rezolvisardăs mišto? Dikhen so reprezentisarel o gin 20 anθ-e problemaqe dăte thaj phenen so doša kerdăs o Kristian!



Arakhen!

$$(70 - 20) : 5 = 50 : 5 = 10$$

Amboldipen: 10 ràfturi

- Savi operàcia rezolvisardàs pes maj anglal? Sosθar?

() rotale parantèze (tikne)



Inkeren godàθe!

Anθ-jekh ginavipen anθ-o savo si rotale parantèze () ginaven pen maj anglal e operàcie anθar e parantèze thaj palal kodoja kolaver operàcie, respektisarindoj e operacienqi òrdina.

Eksèmplo: $8 + 3 \times (23 - 2 \times 10) =$
 $= 8 + 3 \times (23 - 20) =$
 $= 8 + 3 \times 3 =$
 $= 8 + 9 =$
 $= 17$

Klasaqe butà!

1. Ginaven, respektisarindoj e siklile règule!

| | | |
|--------------------|-----------------------|---------------------------|
| a) $15 + 8 : 2$ | b) $27 + 18 : 3 + 14$ | c) $35 + 21 : 7 \times 4$ |
| $40 - 28 : 7$ | $32 - 24 : 3 - 10$ | $19 + 32 : 4 : 2$ |
| $36 : 9 \times 2$ | $42 : 7 + 3 \times 4$ | $65 - 49 : 7 \times 5$ |
| $70 : 10 \times 6$ | $64 : 8 + 63 : 9$ | $15 + 35 : 7 \times 1$ |

2. Ginaven!

| | | | |
|---------------------|---------------------|-----------------|-----------------|
| a) $4 \times 7 + 2$ | b) $8 \times 9 - 5$ | c) $27 : 3 + 3$ | d) $42 : 6 - 4$ |
| $4 \times (7 + 2)$ | $8 \times (9 - 5)$ | $27 : (3 + 3)$ | $42 : (6 - 4)$ |

- Keren e rezultaturenqi komparàcia kaθar svàko pùnkto! So dikhen?

3. Ginaven, respektisarindoj e siklile règule!

| | |
|---|--|
| a) $36 : (6 + 3)$ | f) $32 + 5 \times (15 : 3 + 30 : 10)$ |
| b) $(6 + 21) : 3$ | g) $(36 : 4 - 7) \times (7 \times 7 - 45)$ |
| c) $(30 - 20 : 5) \times 2$ | h) $(81 : 9 + 5) : (25 : 5 + 2)$ |
| d) $(5 : 5 + 5 : 1) + 40 : 10$ | i) $(54 - 20 : 10 \times 0) + (6 \times 7 - 6 \times 5)$ |
| e) $80 - (24 - 14) \times (35 : 7 - 2)$ | j) $(64 - 46) : 3 + 28 : 4 + 8 \times 9 \times 0$ |

4. Utilizisarindoj e rotale parantèze, xramosaren, sar ginavipen, e telutne mangimata thaj palal kodoja rezolvisaren!

- Sodeça si maj bari e ginenqi sùma 24 thaj 51 sar e ginenqi sùma 35 thaj 18?
- Sodeça si maj bari e ginenqi diferènca 85 thaj 65 sar e ginenqi diferènca 54 thaj 42?
- Sode var si maj bari e ginenqi sùma 32 thaj 28 sar e ginenqi diferènca 23 thaj 17?
- Savo si o prodùso maθkar e ginenqi sùma 4 vi 3 thaj e ginesqo anθar 30 kaj si les 6 sar kito?

5. Xramosaren anθ-e štartorre, rezolvisaren thaj palal kodoja xramosaren anθ-e kherorra o trebutno sèmno (<; =; >)!

| | | | |
|--------------------|---------------|-------------------|-----------------|
| a) $36 - (19 - 4)$ | $36 - 19 - 4$ | b) $64 - 51 + 7$ | $64 - (51 + 7)$ |
| c) $(24 - 18) : 2$ | $24 - 18 : 2$ | d) $36 : (4 + 5)$ | $36 : 4 + 5$ |

6. Ginaven thaj phenen kana e avutne propozicie si çaće vaj na!

a) $16 + 5 \times (7 - 4) = 31$

b) $(40 - 16 : 2) + 30 : 6 = 36$

c) $(6 \times 8 + 5 \times 8) : 4 \times 0 = 5$

d) $14 + (34 - 2 \times 8) = 32$

7. Le Kosminos si les 35 kompakt-diskurã (CD-urã) filmurença thaj 15 muzikaça. Vov laçhardãs e CD-urã anθ-jekh egãlo mòdo p-e 5 ràfturã. Sode ràfturã pherdãs?

• Rezolvisaren i problèma anθ-e duj çhanda!

• Vaš svãko mòdo, xramosaren o rezolvisaripen anθar jekh ginavipen!

8. Keren jekh problèma palal o dino ginavipen!

$(14 + 7) \times 3 = ?$

9. Komponisaren ginavimata utilizisarindoj e štar operãcie thaj e rotale parantèze kadjal ke:

a) e gina te aven anθ-i rotali parantèza!

b) e gina te na aven anθ-i rotali parantèza!

10. Xramosaren e ginavimata anθ-e štatorre. Thon parantèze, anθ-e duj mòdurã, kaj te aresel pes anθ-o svãko ginavipen po duj ginavimata ververe rezultaturença.

$4 \times (2 + 3 \times 2) = 32$

a) $20 - 20 : 4 + 5$; b) $3 \times 6 : 1 + 5$; c) $3 \times 3 + 3 : 3$

$4 \times (2 + 3) \times 2 = 40$

11. K-i òra vaš e praktikane zanglimata, e siklövne kerde 30 çerxenörrã, haj luludörrã, 10-ença maj but. Anθar e kerde butã kerde 5 idèntiko thava. Sode butã sas thovdine pa jekh thav?

• Anθar e telutne ginavimata, alosaren o ginvipen savo si laçho vaš e problemaço rezolvisaripen! Keren i problèma rezolvisaripnasqe planoça kaj te šaj te kerel pes e amboldipnasqi verifikãcia!

a) $30 + 30 + 10 : 5$

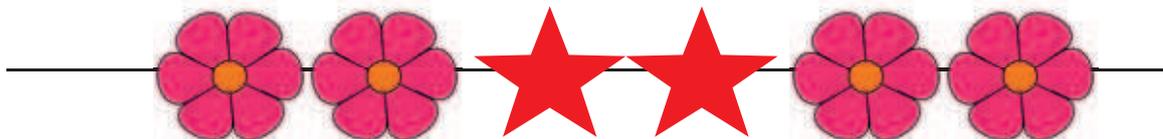
b) $(30 + 10) : 5$

c) $30 : 5 + (30 + 10) : 5$

d) $30 + 10 : 5$

• Dikhen sar thovde e çhave e butã p-o svãko thav! Xramosaren anθ-e štatorre thaj pheren svãko thav inkã 4-e butãnça!

a)



b)



• Arakhen aver mòdurã kaj te thon e butã p-e thava!





12. Evaluàcia

1. Xramosaren e palemkerde tiknederimata sar xulavimata!

a) $15 - 5 - 5 - 5 = 0$

b) $20 - 4 - 4 - 4 - 4 - 4 = 0$

c) $35 - 7 - 7 - 7 - 7 - 7 = 0$

2. Ginaven e xulavimata, utilizisarindoj o phandipen e butãripnaça!

a) $20 : 5$ b) $10 : 5$ c) $56 : 7$

$28 : 7$ $30 : 6$ $48 : 6$

$36 : 4$ $50 : 5$ $8 : 8$

3. Ginaven thaj keren i verifikàcia!

a) $4 \times 8 = ?$ b) $72 : 9 = ?$

4. Arakhen:

a) o gin 7-ça maj tikno sar o 15!

b) o gin 6 var maj tikno sar o 30!

c) e ginenço kïto 40 thaj 10!

5. Arakhen:

a) e ginesqi paś 16!

b) jekh trinipen anθar o gin 30!

c) o firtari / staripen e ginesqo 28!

6. I Elena kidās 28 luludā, haj i Alina, 35 luludā. Von kerde luludānqe vasta anθar po 7 luludānqe. Sode luludānqe vasta si len khethanes?

| Ìtemo / Kalifikativo | 1 | 2 | 3 | 4 | 5 |
|----------------------|---------------------------|------------------|-----------------|---------------------------|-----------------------|
| Dòsta | a vaj b vaj c | 3 áće ginavimata | a, b biprobaçe | a vaj b vaj c | jekh laço ginavipen |
| Mišto | (a, b); (b, c) vaj (a, c) | 6 áće ginavimata | a vaj b probaça | (a, b); (b, c) vaj (a, c) | 2 áće ginavimata |
| But mišto | a, b, c | a, b, c | a, b probaça | a, b, c | pherdo rezolvisaripen |

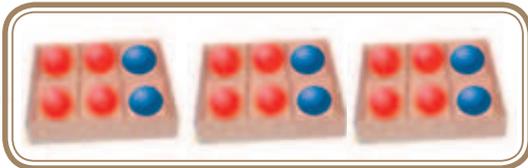


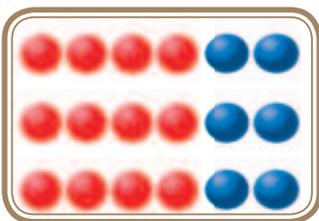
V. O BUTĀRIPEN THAJ O XULAVIPEN E NATURALONE GINENQO KAΘAR O K-I 1000

1. O butāripen jekhe sumaça vaj jekhe diferençaça

- Anθ-i svāko kutia si 4 lole bile thaj 2 bodle bile. Sode bile si anθ-e 3 kutie sa kodole fālosqe?

Maj anglal arakhas e bilenqo gin anθar jekh kutia!

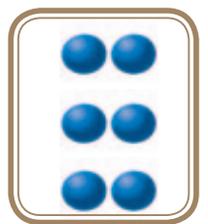


1.  $4 + 2 = 6$
2.  $3 \times 6 = 18$

Xramosarel pes vi kadja:

$$3 \times (4 + 2) = 3 \times 6 = 18$$

Šaj ginavel pes vi kadja! Arakhas maj anglal sode bile si anθar svāko rang!

1.  $3 \times 4 = 12$
2.  $3 \times 2 = 6$
3. $12 + 6 = 18$

Xramosarel pes vi kadja:

$$3 \times (4 + 2) = 3 \times 4 + 3 \times 2 = 12 + 6 = 18$$



Inkeren godāθe!

Kaj te butārel pes jekh gin jekhe biginavde sumaça kerel pes kadja:

- ginavel pes i sūma thaj palal kodoja o gin **butārel pes** e arakhle sumaça. vaj
- **butārel pes** o gin svakone sumaçe termenoça thaj palal kodoja kidāren pen e line prodūsurā.

Arakhen!

$$7 \times (8 - 5) = 7 \times 3 = 21$$

vaj

$$7 \times (8 - 5) = 7 \times 8 - 7 \times 5 = 56 - 35 = 21$$

Interesānto! Vi o butāripen jekhe ginesqo jekhe diferençaça kerel pes sa kadja!



Klasaqe bută!

1. Ginaven, palal o dino modèlo!

$$6 \times (3 + 4) = 6 \times 7 = 42$$

vaj $6 \times (3 + 4) = 6 \times 3 + 6 \times 4 =$
 $= 18 + 24$
 $= 42$

a) $3 \times (4 + 6)$

$2 \times (3 + 5)$

$6 \times (2 + 4)$

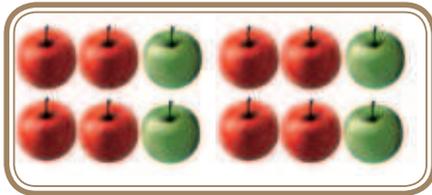
b) $(5 + 2) \times 4$

$(7 + 1) \times 5$

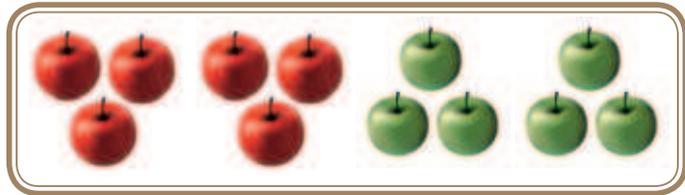
$(4 + 3) \times 8$

2. Dikhen e çitre, palal kodoja xramosaren e ginavimata anθar save arakhen e frukturānqo gin!

a)



b)



3. Bi te keren e ginavimata, phenen kana e avutne matematikane propozicie si çace vaj na!

a) $(6 + 2) \times 4 = 6 \times 4 + 2 \times 4$

b) $4 \times (7 - 5) = 4 \times 7 - 4 \times 5$

c) $(6 + 3) \times 2 = (6 - 3) \times 2$

d) $8 + (3 + 2) = 8 \times (3 + 2)$

4. Dikhen o modèlo thaj palal kodoja ginaven!

$7 \times 6 - 7 \times 4 = 7 \times (6 - 4) =$

$= 7 \times 2 =$

$= 14$

a) $4 \times 3 - 2 \times 3$

$7 \times 4 - 7 \times 1$

$5 \times 9 - 5 \times 5$

b) $6 \times 5 + 6 \times 8$

$8 \times 5 + 8 \times 3$

$2 \times 7 + 2 \times 3$

5. Kaj te sukarāren i klāsa, e siklōvne kinde 5 sèturā lole bizlença. Anθ-o svāko sèto si 4 zèlena bizlā thaj 6 gālbenā. Sode bizlā si anθ-o totālo?

• Rezolvisaren i problēma anθar jekh ginavipen, anθ-e duj mòdurā!

6. Xramosaren anθ-e štartorre thaj palal kodoja pheren e semnurānça “+”, “-”, “×”, kaj te aresel pes k-e çace propozicie!

a) $3 \square (5 \square 2) = 3 \square 7$

b) $5 \square (8 \square 3) = 5 \square 5$

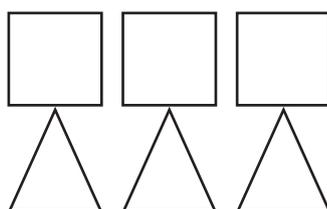
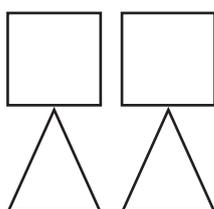
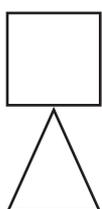
c) $2 \square (4 \square 2) = 2 \square 4 \square 2$

d) $4 \square 6 = 4 \square (5 \square 1)$



KHELIPEN!

Keren grupe po 2 kolegurenqe! Dikhen e çitre thaj e rovlōrrānqo gin utilisarde vaš svāko figūra. Sode rovlōrrā utilisarena pen vaš i panzto figūra anθar o širo. Tha vaš i oxtoto?



| | | |
|---------|--------------------|--------------------|
| 1 | 2 | 3 |
| $4 + 3$ | $2 \times (4 + 3)$ | $3 \times (4 + 3)$ |



2. O butëripen e 10-ça vaj e 100-ça

$1 \times 10 = 10$

$4 \times 10 = \boxed{?}$

$7 \times 10 = \boxed{?}$

$2 \times 10 = 20$

$5 \times 10 = \boxed{?}$

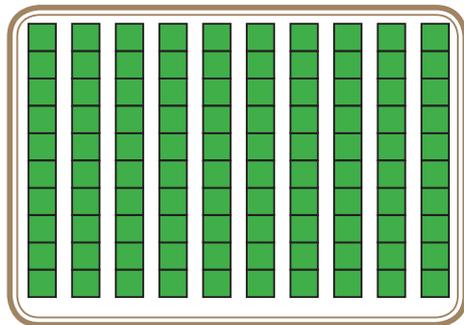
$8 \times 10 = \boxed{?}$

$3 \times 10 = 30$

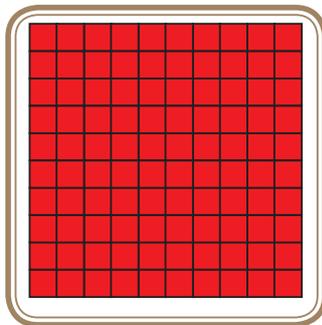
$6 \times 10 = \boxed{?}$

$9 \times 10 = \boxed{?}$

• Arakhen!

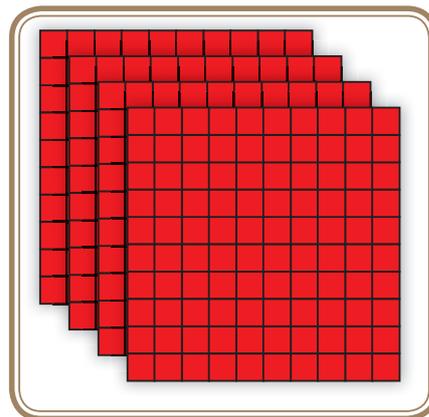


10 var po 10



100

Deç $10 \times 10 = 100$



• Ka-jekh khelipen p-o kompjutero, o Mihaj lias 4 var po 100 pùntkurà. Sode pùntkurà lias?

$4 \text{ var po } 100 \longrightarrow 100 + 100 + 100 + 100 = 4 \times 100 = 400$

Amboldipen: 400 pùntkurà



Inkeren godàthe!

Kaj te aresel pes k-o rezultàto e butëripenasqo jekhe ginesqo e 10-ça, thol pes anθ-i çáci rig kodole ginesqi i cìfra 0.

Kaj te aresel pes k-o rezultàto e butëripenasqo jekhe ginesqo e 100-ça, thol pes anθ-i çáci rig kodole ginesqi duj 0.

Klasaqe butà!

1. Ginaven.

a) 6×10

b) 9×10

c) 3×10

d) 10×7

6×100

9×100

3×100

100×7

2. Arakhen e gina 10 var maj bare sar: 16; 73; 89; 95!

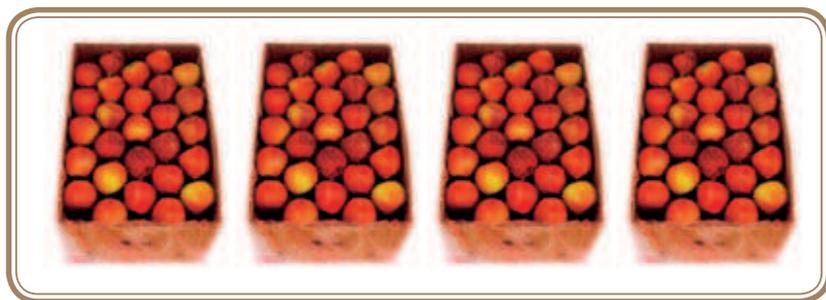
3. Xramosaren e gina 400; 800; 600 thaj 200 sar prodùsurà duje faktorurenqe, maškar save jekh te avel 100!
Eksèmplo: $300 = 3 \times 100$

4. Xramosaren e gina 470; 580; 940 thaj 250 sar prodùsurà duje faktorurenqe, maškar save jekh te avel 10!
Eksèmplo: $360 = 36 \times 10$

5. Arakhen e prodùsurà maškar e bizutesqe gina xramosarde duje identikone cifrença thaj o gin 10!

3. O butäripen jekhe naturalone ginesqo kerdo anθar duj cìfre jekhe gineça anθar jekh cìfra

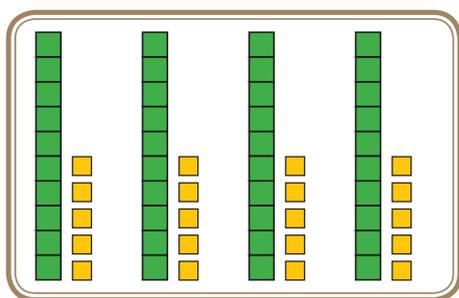
• Ka-jekh magazino sas andine 4 moxtonorre, po 15 kilogràmurá phabajança. Sode kilogràmurá phabajenqe sas andine?



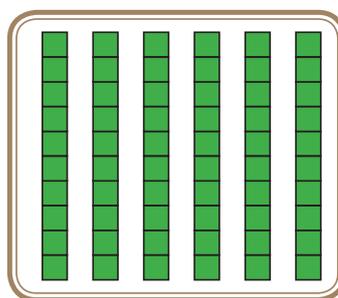
$$4 \times 15 = 15 + 15 + 15 + 15 = 30 + 15 + 15 = 45 + 15 = 60 \text{ phabaja sas andine?}$$

Amboldipen: 60 kilogràmurá

• Arakhen!



4 grùpe po 15 palemkethanärde



keren 60

Ginavas, xramosarindoj o gin 15 sar sùma, kadja:

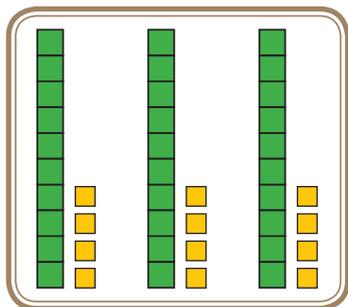
$$\begin{aligned} 4 \times 15 &= 4 \times (10 + 5) = \\ &= 4 \times 10 + 4 \times 5 = \\ &= 40 + 20 = \\ &= 60 \end{aligned}$$

Klasaqe butä!

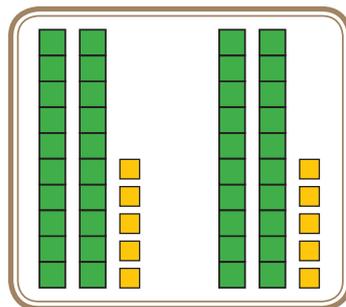
1. Ginaven anθar palemkerdo kideripen e barabare termenurença!

- | | | |
|------------------|------------------|------------------|
| a) 3×26 | b) 5×25 | c) 6×18 |
| 2×66 | 4×32 | 9×15 |
| 5×31 | 3×62 | 8×23 |

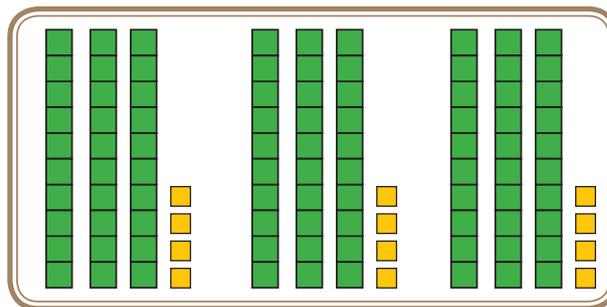
2. Ginaven, utilizisarindoj e cìtre!



3×14



2×25

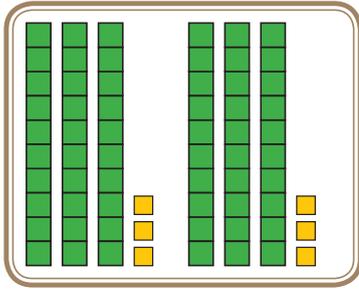


3×34

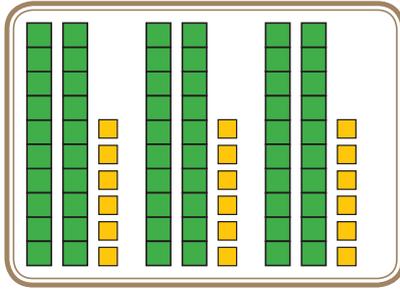
3. Ginaven, reprezentisarindoj o dujto fäktoro, anθar jekh cìtro, sar ka-o ginavipen 2.

- | | | |
|------------------|------------------|------------------|
| a) 3×17 | b) 5×14 | c) 2×18 |
|------------------|------------------|------------------|

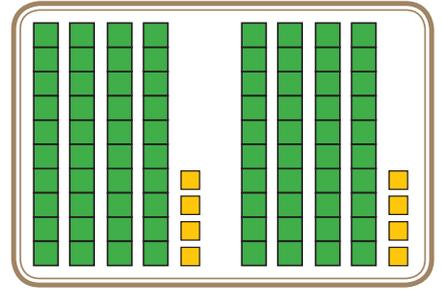
4. Xramosaren e butërimata reprezentisarde anθ-e çitre thaj arakhen o prodùso!



$$2 \times \boxed{?} = \boxed{?}$$



$$3 \times \boxed{?} = \boxed{?}$$



$$2 \times \boxed{?} = \boxed{?}$$

5. Ginaven, palal o dino modèlo! Keren e rezultatenqi verifikàcia anθar palemkerdo kideripen!

$$\begin{aligned} 4 \times 18 &= 4 \times (10 + 8) = \\ &= 4 \times 10 + 4 \times 8 = \\ &= 40 + 32 = \\ &= 72 \end{aligned}$$

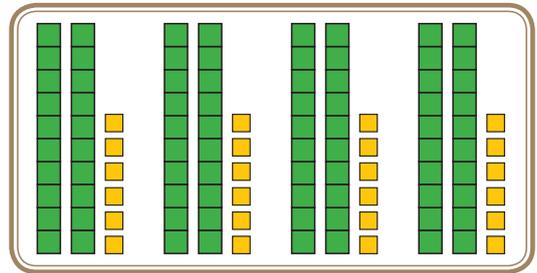
a) 4×11
 2×19
 5×14

b) 5×18
 8×12
 3×17

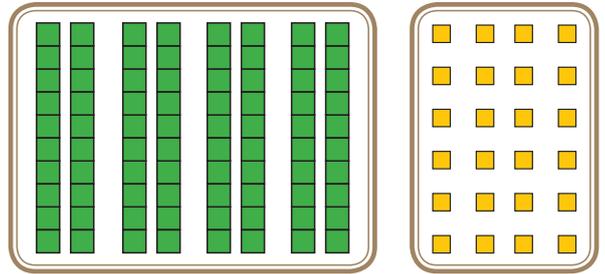
c) 6×13
 9×15
 8×16



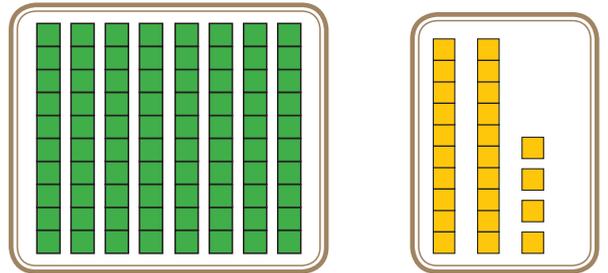
Reprezentisaras o dujto fàkto 4 var



Thovas rigaθe e deša thaj e jekhimata:

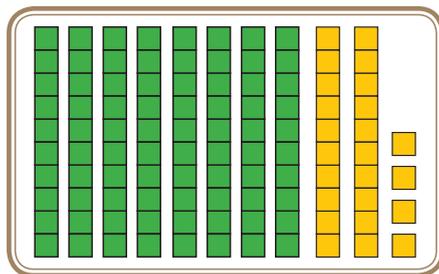


Khethanàras e deša thaj e jekhimata:

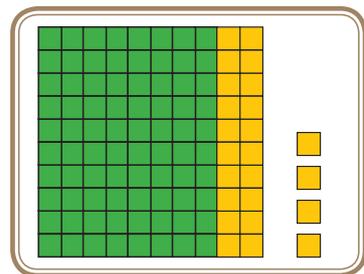


80

24



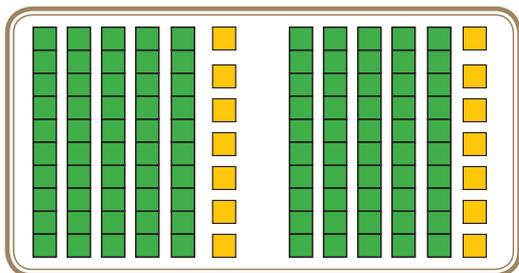
10 deša thaj 4 jekhimata



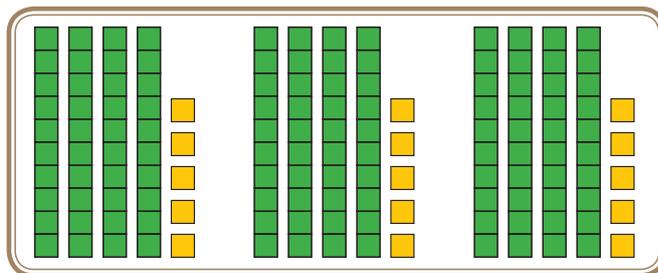
104

Deç, $4 \times 26 = 104$

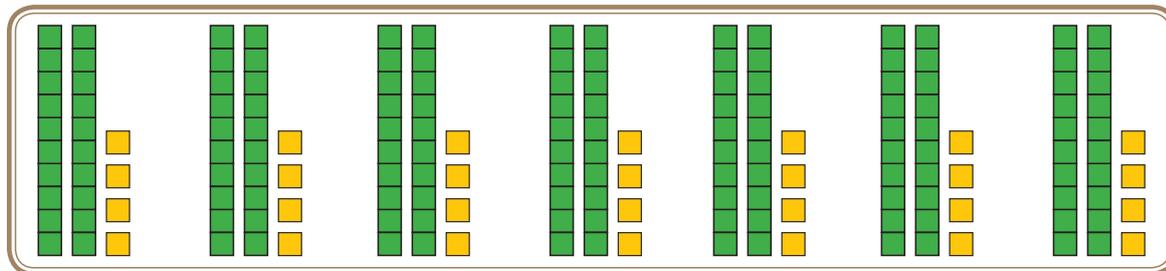
6. Ginaven!



$$2 \times 57$$



$$3 \times 45$$



$$7 \times 24$$

7. Ginaven, palal o dino modèlo!

$$\begin{aligned} 3 \times 40 &= 3 \times 4 \times 10 = \\ &= 12 \times 10 = \\ &= 120 \end{aligned}$$

a) 4×50
 5×30
 3×70

b) 3×80
 8×60
 5×50

c) 6×30
 9×40
 8×40

8. Ginaven, palal o dino modèlo! Keren e rezultatenqi verifikàcia anθar palemkerdo kideripen!

$$\begin{aligned} 3 \times 48 &= 3 \times (40 + 8) = \\ &= 3 \times 40 + 3 \times 8 = \\ &= 120 + 24 = \\ &= 144 \end{aligned}$$

a) 5×34
 7×53
 4×44
 6×53

b) 3×68
 4×32
 7×28
 9×36

9. E siklövne jekhe školaqe telärde anθ-i ekskürsia. Sode çhave telärde, kana pherde 3 tikne autobùzură svàko po 18 thanença thaj jekh autobùzo 35 thanença?

10. Arakhen e gina 4 var maj bare sar 54; 38; 29! Ginaven anθar palemkerdo kideripen!

11. E siklövne thvodine anθ-e školaqi bar 4 rëndură po 16 trandafirurănça p-jekh rëndo, thaj krinură jekh dujvarno gin sar e trandafirurenço gin. Sode luludă votanärde e siklövne?

12. Kaj te keren e ginavimata, o Florin thaj o Kosmin utilizisarde e telutne kòdură.



$$3 \times 24 = 72$$



▲ – jekh deş
 ■ – jekh jekhipen

$$3 \times 25 = 75$$



• Utilizisarindoj sakodova kòdură, ginaven: 4×23 5×16 3×18

4. O butäripen jekhe naturalone ginesqo anθar trin cìfre jekhe gineça anθar jekh cìfra

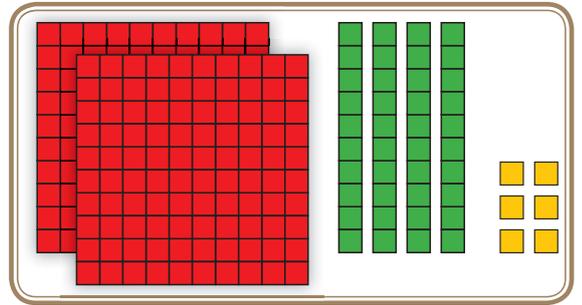
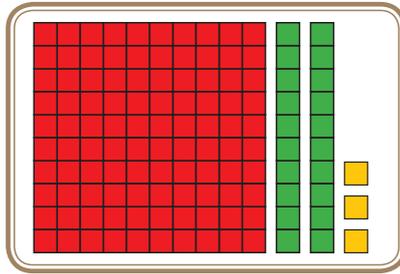
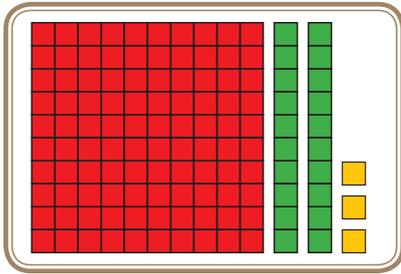
- Anθ-jekh lil si 123 problème. Sode problème si anθ-e duj lila sakodole fãlosqe?

$$2 \times 123 = ?$$

E problemenqo gin:

- o jekhto lil

- o dujto lil



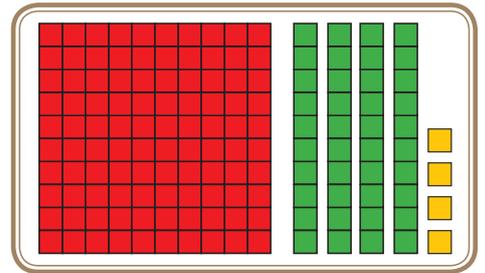
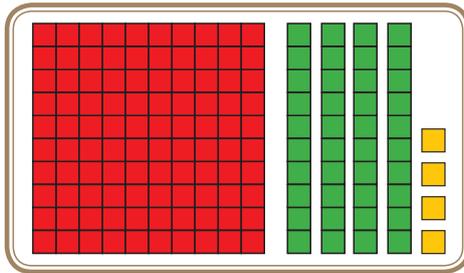
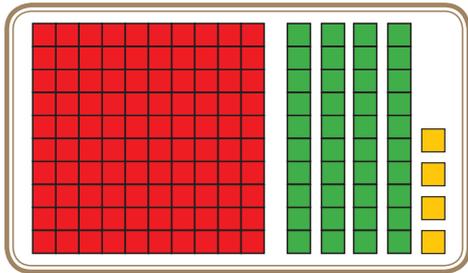
$$2 \times 123 = 246$$

Amboldipen: 246 problème

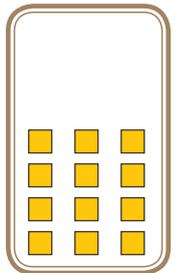
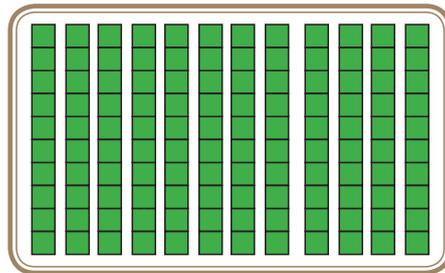
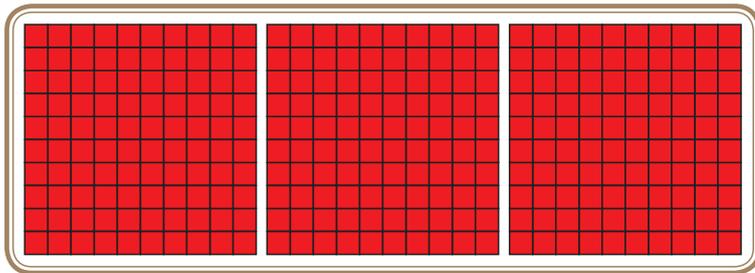
- Ginaven e problemenqo gin, utilizisarindoj o palemkerdo kideripen!

• **Arakhen!** $3 \times 154 = ?$

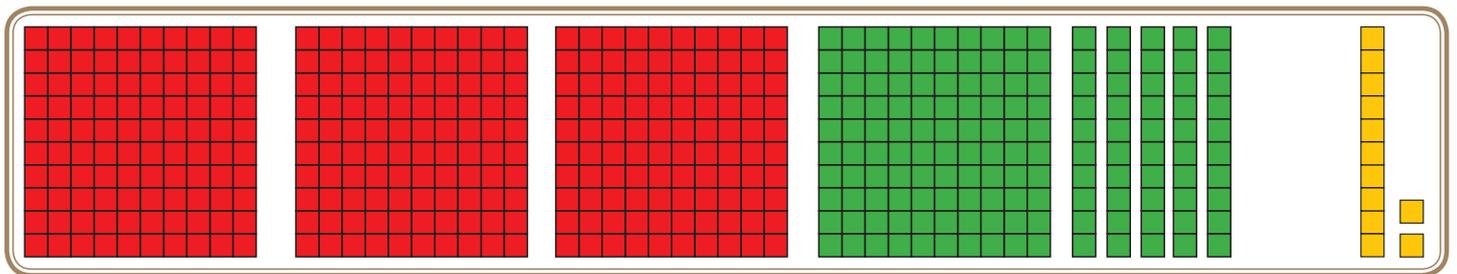
- Reprezentisaras o dujto fãktoro trinvar:



- Khethanãras e sèla, e deša thaj e jekhimata



- Palemkhethanãras e deša thaj e jekhimata:



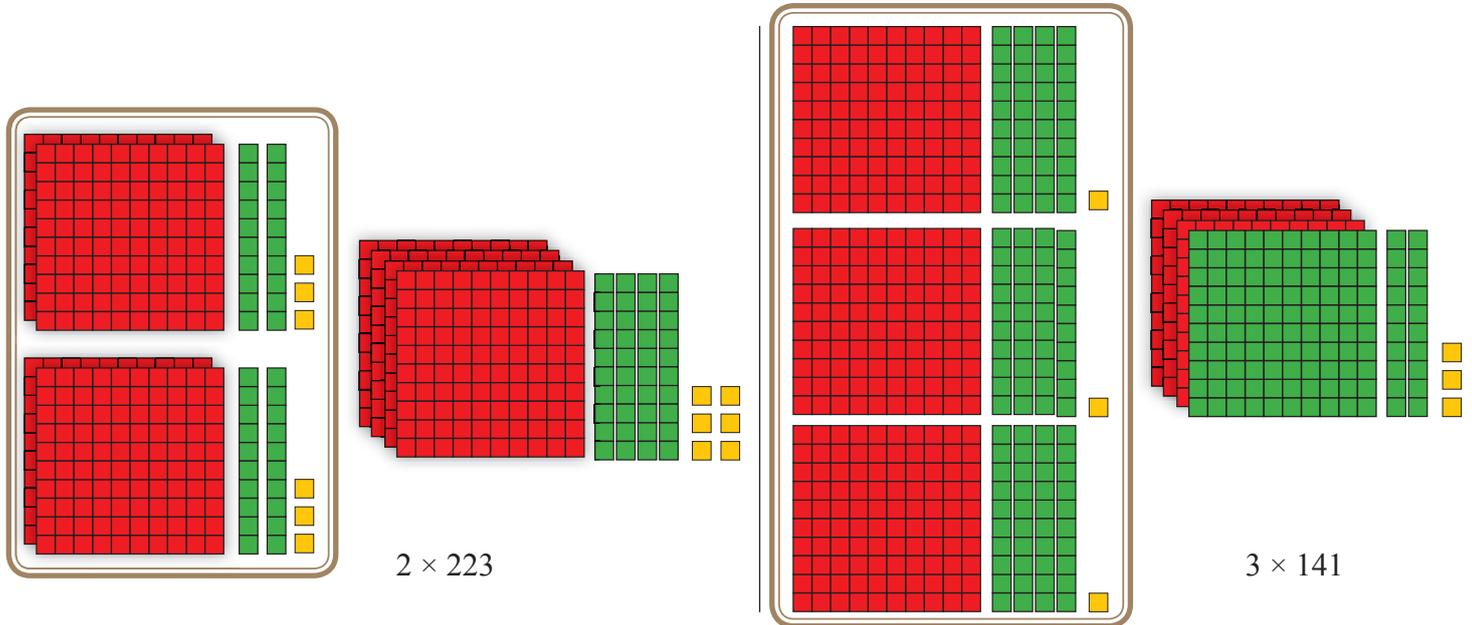
$$3 \times 154 = 462$$

Klasaqe bută!

1. Ginaven anθar palemkerdo kideripen e barabare termenurença!

- a) 3×234 b) 2×285 c) 6×118
 2×251 4×132 5×126

2. Xramosaren e butărimata reprezentisarde anθ-o ćitro thaj ginaven!



3. Arakhen e ginenqo trinvarno: 135; 241; 162!

4. Anθ-jekh pherelin barōn 175 ambrola, haj phabaja, dujvar maj but. Sode rukha barōn anθ-i pherelin?

5. Ginaven, palal o dino modėlo!

$$3 \times 200 = 3 \times 2 \times 100 = 6 \times 100 = 600$$

a) $3 \times 300 = 2 \times 300$ b) $2 \times 400 = 2 \times 200$ c) $4 \times 200 = 1 \times 400$

6. Ginaven, palal o dino modėlo!

$$2 \times 248 = 2 \times (200 + 40 + 8) = 2 \times 200 + 2 \times 40 + 2 \times 8 = 400 + 80 + 16 = 496$$

a) $4 \times 134 = 2 \times 153$ b) $3 \times 268 = 4 \times 232$

7. Dikhen e ginavimata thaj arakhen o fãktoro savo palemavel anθ-o svãko kėzo! Keren e ginavimata, palal o dino modėlo!

$$2 \times 136 + 2 \times 214 = 2 \times (136 + 214) = 2 \times 350 = 700$$

- a) $2 \times 142 + 2 \times 158$ b) $3 \times 106 + 3 \times 194$
 $2 \times 245 + 2 \times 155$ $3 \times 138 + 3 \times 162$

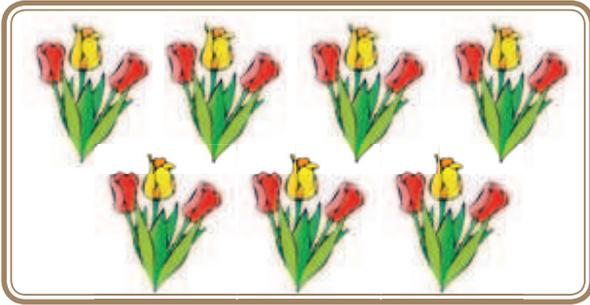
5. O xulavipen jekhe sumaqo vaj jekhe diferenciaqo ka-jekh gin anθar jekh cıfra

• I Denisa kidäs 9 tuliphanda lole thaj 12 tuliphanda gälbena. Voj kamel te kerel luludänqe vasta po 3 tuliphandença. Sode luludänqe vasta šaj te kerel?



Kerasa luludänqe vasta, thovindoj luludä s-ol duje rangenqo!

$$1) 9 + 12 = 21$$



$$2) 21 : 3 = 7$$

Šaj xramosares vi kadja:
 $(9 + 12) : 3 = 21 : 3 = 7$

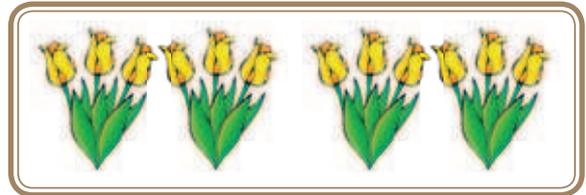


Anθ-o sväko luludänqo vast thovasa luludä jekhe rangaqe!

$$1) 9 : 3 = 3$$



$$2) 12 : 3 = 4$$



Šaj te xramosarel pes vi kadja:
 $9 : 3 + 12 : 3 = 3 + 4 = 7$



Inkeren godäthe!

Kaj te xulavas jekh biginavdi sùma ka-jekh gin, kerel pes kadja:

- ginavel pes i sùma thaj palal kodoja xulavel pes kodole gineshe.

vaj

- xulavel pes sväko sumaqo tèrmeno kodole gineshe, palal kodoja kidären pen e dine kiturä.

• Arakhen!

$$(38 - 18) : 2 = 20 : 2 = 10$$

vaj

$$\begin{aligned} (38 - 18) : 2 &= 38 : 2 - 18 : 2 = \\ &= 19 - 9 = \\ &= 10 \end{aligned}$$

Si sado! Jekh biginavdi diferència xulavel pes k-jekh gin sar jekh sùma!



Klasaqe butä!

1. Ginaven, palal o dino modëlo!

$$(6 + 4) : 2 = 10 : 2 = 5$$

vaj $(6 + 4) : 2 = 6 : 2 + 4 : 2 =$
 $= 3 + 2$
 $= 5$

a) $(32 + 16) : 8$

$$(49 + 28) : 7$$

$$(45 + 20) : 5$$

b) $(32 - 16) : 8$

$$(49 - 28) : 7$$

$$(45 - 20) : 5$$

2. Phagen e xulavipnasqo gin anθ-e deša thaj jekhimata thaj palal kodoja ginaven palal o dino modèlo!

$$44 : 4 = (40 + 4) : 4 = \quad \text{a) } 55 : 5 \quad \text{b) } 26 : 2$$

$$= (40 : 4) + (4 : 4) = \quad 39 : 3 \quad 66 : 6$$

$$= 10 + 1 = \quad 48 : 4 \quad 88 : 8$$

$$= 11 \quad 99 : 9 \quad 77 : 7$$

3. Dikhen e xulavimata thaj phenen savo si o xulavitòri anθ-o svàko kèzo! Utilizisaren o modèlo thaj palal kodoja ginaven!

$$27 : 3 - 21 : 3 = (27 - 21) : 3 = \quad \text{a) } 48 : 6 - 24 : 6 \quad \text{b) } 45 : 9 - 27 : 9$$

$$= 6 : 3 = \quad 72 : 8 - 48 : 8 \quad 56 : 7 - 28 : 7$$

$$= 2$$

4. Bi te keren e ginavimata, phenen kana e avutne propozicie si çaçe vaj na!

a) $(48 - 12) : 6 = 48 : 6 - 12 : 6$ b) $(56 - 40) : 8 = 56 : 8 + 40 : 8$
 c) $(16 - 12) : 4 = (16 + 12) : 4$ d) $56 : 7 - 21 : 7 = (56 - 21) : 7$

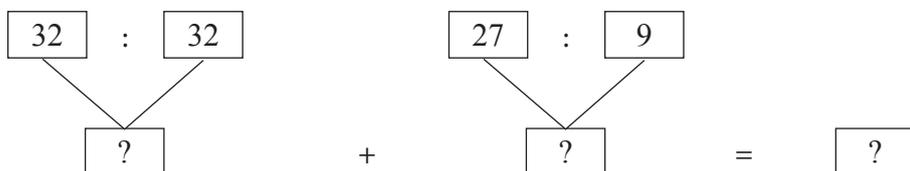
5. I daj kindàs kaθar o magazino 18 kilogràmurà phabaja thaj 27 kilogràmurà ambrola. Voj kamel te thol len anθ-e moxtona po 9 kilogramurenqe, bi te kombinisarel len. Sode moxtona labàrela?

6. Xramosaren anθ-e štartorre thaj palal kodoja pheren e kherorra e trebutne ginença, kaj te avel çaçe e propozicie!

a) $(32 + \boxed{?}) : 5 = 40 : 5$ b) $(15 + \boxed{?}) : 3 = (15 : 3) + (\boxed{?} : 3)$
 c) $(\boxed{?} - 7) : 6 = 24 : 6$ d) $(28 - \boxed{?}) : 4 = (28 : 4) - (\boxed{?} : 4)$

7. Komponisaren jekh problèma savi te rezolvisarel pes anθar o dino ginavipen: $(24 + 15) : 3$

8. Komponisaren jekh problèma palal i dini skèma!



6. O xulavipen k-o 10 vaj k-o 100

Te palemdikhas!

| | | |
|---------------|-----------------------|-----------------------|
| $10 : 10 = 1$ | $40 : 10 = \boxed{?}$ | $70 : 10 = \boxed{?}$ |
| $20 : 10 = 2$ | $50 : 10 = \boxed{?}$ | $80 : 10 = \boxed{?}$ |
| $30 : 10 = 3$ | $60 : 10 = \boxed{?}$ | $90 : 10 = \boxed{?}$ |

Xulavindoj jekh gin k-o 10 arese pes ka-jekh gin 10 var maj tikno!



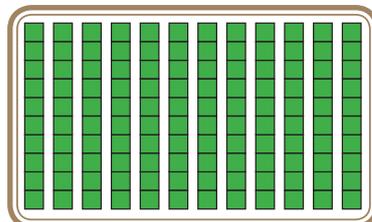
Arakhen!

• Anθ-jekh kutia sasas 120 kùburà. I Alina xulavdàs len anθ-e grùpe po 10-enqe. Sode grùpe kerdàs?



O 10 tiknederel pes 12 var anθar 120!

$$120 : 10 = 12$$



• **Dikhen!**

$5 \times 10 = 50$

$5 \times 100 = 500$

$50 \times 10 = 500$

$50 : 10 = 5$

$500 : 100 = 5$

$500 : 10 = 50$



Inkeren godăthe!

Kaj te arakhel pes o rezultato kana xulavel pes k-o 10 jekh naturalo gin savo si les k-o agor 0-ură, ankalavel pes kaθar e ginesqo agor jekh 0.

Kaj te arakhel pes rezultato kana xulavel pes k-o 100, jekh naturalo gin savo si les k-o agor 0-ură, ankalavel pes kaθar e ginesqo agor duj 0.

Klasaqe bută!

1. Ginaven!

a) $60 : 10$

b) $90 : 10$

c) $30 : 10$

d) $710 : 10$

$600 : 10$

$900 : 10$

$300 : 10$

$580 : 10$

$600 : 100$

$900 : 100$

$300 : 100$

$640 : 10$

2. Arakhen e gina 10 var maj tikne sar: 60; 160; 600; 660!

3. Arakhen e gina 100 var maj tikne sar: 300; 500; 800!

4. Xramosaren anθ-e štartorre, palal kodoja keren i komparacia thaj xramosaren anθ-e kherorra jekh anθar e sèmnură: <; =; >.

a) 50×1 $50 : 10$

b) $800 : 10$ $800 : 100$

$40 : 10$ 40×10

$700 : 100$ $70 : 10$



7. O xulavipen jekhe naturalone ginesqo maj tikno sar 100 ka-jekh gin anθar jekh cifra

Te palemdikhas!

$4 + 2 = 6$

$7 - 3 = 4$

$4 \times 2 = 8$

$40 : 20 = 60$

$70 - 30 = 40$

$4 \times 20 = 80$

• La Andreea si la 60 pòze. Voj thol len anθ-jekh barabar mòdo anθ-e duj albùmură. Sode pòze thol anθ-jekh albùmo?

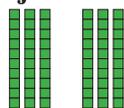
6 jekhimata



3 jekhimata 3 jekhimata

$6 : 2 = 3$

6 jekhimata



3 deša 3 deša

$60 : 2 = 30$

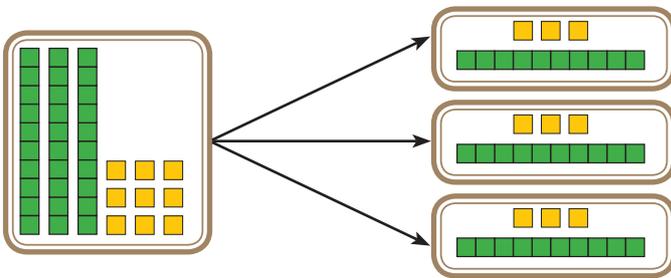
E deša xulaven pen sakadja sar e jekhimata!



• Utilizarindoj o xulavipen $8 : 2 = 4$, ginaven $80 : 2$.

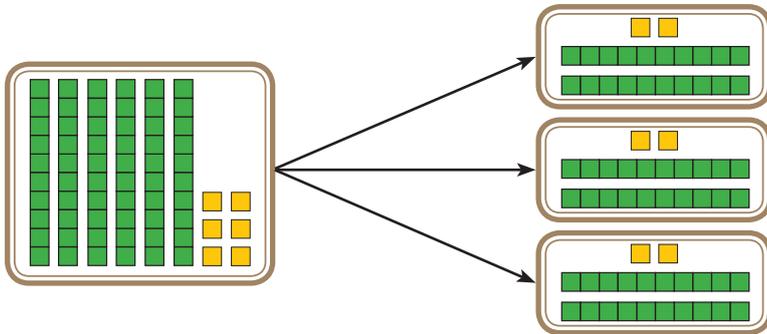
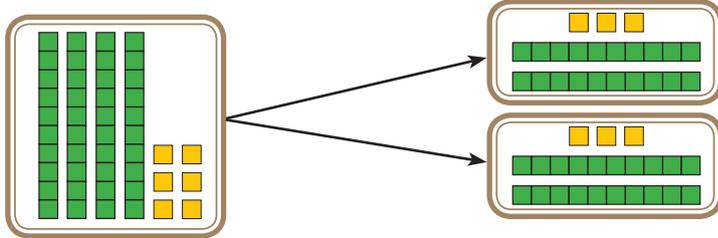
Arakhen!

$39 : 3 = ?$



$39 : 3 = 13$

- Utilizisarindoj e çitre, xramosaren e trebutne xulavipnasqe operacjie!



- Anen tumenqe godãthe e kòdurã save utilizisarenas len o Florin thaj o Kosmin kaj te ginaven e butãrimata!

▲ – jekh deš ■ – jekh jekhipen

Utilizisarindoj sakodola kòdurã, ginaven:



- a) $86 : 2$ b) $39 : 3$ c) $69 : 3$ d) $93 : 3$

La siklãrnã si la 56 bombòne. Voj kamel te del sarkone çhavesqe po 4 bombòne. Vaš sode çhave aresen laqe e bombòne?



Ginavava anθar palemkerdo tiknederipen!

- $56 - 4 = 52$
 - $52 - 4 = 48$
 - $48 - 4 = 44$
 - $44 - 4 = 40$
 - $40 - 4 = 36$
 - $36 - 4 = 32$
 - $32 - 4 = 28$
 - $28 - 4 = 24$
 - $24 - 4 = 20$
 - $20 - 4 = 16$
 - $16 - 4 = 12$
 - $12 - 4 = 8$
 - $8 - 4 = 4$
 - $4 - 4 = 0$
- Ankalavdãs pes 4, 14 var.

Si prã but tiknederimata! Me godisarava kadja!



- $56 - 4 = 52$
- $52 - 4 = 48$
- $48 - 4 = 44$
- $44 - 4 = 40$

3i akana anakalavdem 4, 4 var. Na maj kerava tiknederimata, kodolesqe ke zanav ke anθar 40 tiknederel pes o 4, 10 var. Deç, 4 tiknederel pes anθar 56:

$4 + 10 = 14$ var
 $56 : 4 = 14$

Šaj te ginavas vi kadja!

$56 : 4 = (40 + 16) : 4$
 $= 40 : 4 + 16 : 4$
 $= 10 + 4$



Klasaqe bută!

1. Ginaven.

a) $9 : 3$
 $90 : 3$

b) $6 : 2$
 $60 : 2$

c) $8 : 4$
 $80 : 4$

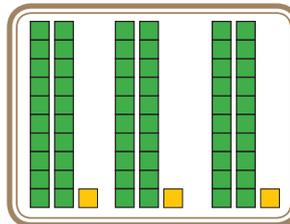
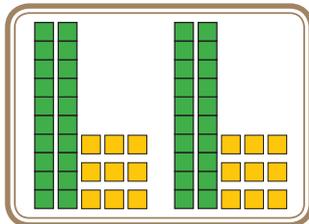
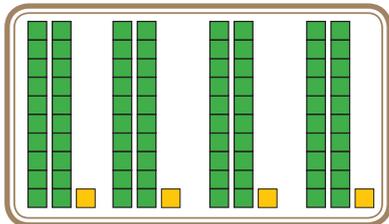
d) $8 : 2$
 $80 : 2$

2. Vaś svăko xulavipen, arakhen o trebuto ċitro thaj arakhen e xulavimatenqo kĳto!

a) $69 : 3$

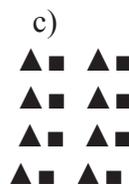
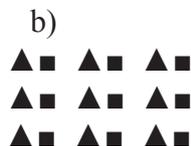
b) $84 : 4$

c) $58 : 2$



• Keren i verifikăcia, kerindoĳ i prĳba anĳar butăripen!

3. Utilizarindoĳ e kĳdură: ▲ – jekh deś ■ – jekh jekhipen, xramosaren e trebuto xulavimata vaś e ċitre thaj arakhen o kĳto/o kozom!



4. Ginaven, phagindoĳ e xulavipnasqo gin anĳ-jekh konvenăbilo sŭma, palal o dino modĳlo!

$$\begin{aligned} 56 : 4 &= (40 + 16) : 4 = \\ &= 40 : 4 + 16 : 4 = \\ &= 10 + 4 = \\ &= 14 \end{aligned}$$

a) $48 : 3$
 $34 : 2$
 $52 : 4$

b) $78 : 6$
 $65 : 5$
 $84 : 7$

5. Arakhen e gina trinvar maj tikne sar: 3; 33; 66 thaj 99!

6. Arakhen o kĳto maśkar o maj baro naturălo gin xramosardo duje cifrenĳa thaj o gin 9!

7. Ka-jekh magazĳno sas andine 84 banăne. Anĳ-o jekhto deś bikindăś pes jekh paś anĳar lenĳe, haj anĳ-o duĳto deś jekh paś anĳar e aĳhile banăne. Sode banăne sas bikinde anĳ-o duĳto deś?

• Thon aver puĳhimata vaś kadaja problĳma thaj palal kodoĳa rezolvisaren!

8. Problĳme vaś e datenqo ordonisaripen anĳ-o tabĳlo

1. E zenenqe save resle le maj anglutne k-jekh sportosqo konkurso sas lenqe dini jekh ekskŭrsia. Dikhen e dăte anĳar o tabĳlo thaj palal kodoĳa ambolden ka-e puĳhimata!

| O them \ katorliitoră | I Rumŭnia | I Itălia | I Frăncia | I Grĳcia | I Ungria | Totălo |
|-----------------------|-----------|----------|-----------|----------|----------|--------|
| ĳhaja | 26 | 17 | 21 | 16 | 11 | ? |
| ĳhave | 32 | 23 | 27 | 19 | 14 | ? |
| Totălo | ? | ? | ? | ? | ? | ? |

• Sode ĳhave avile anĳ-i ekskŭrsia? Ginaven kadja:

- arakhen e ĳhajanqo totălo gin thaj palal kodoĳa e ĳhavenqo totălo gin;
- arakhen e ĳhavenqo gin avile anĳar svăko them.

- Sodeça si maj baro e çhavenqo gin anθar i Frància sar e çhavenqo gin anθar i Ungria?
- Utilizarindoj e dàte anθar o tabèlo, thon vi aver puçhimata!

2. E siklövne anθar jekh škòla sas puçhle palal e khelipnasqo vaxt ka-o kompùtero. Dikhen e dàte anθar o tabèlo thaj palal kodoja ambolden ka-e puçhimata.

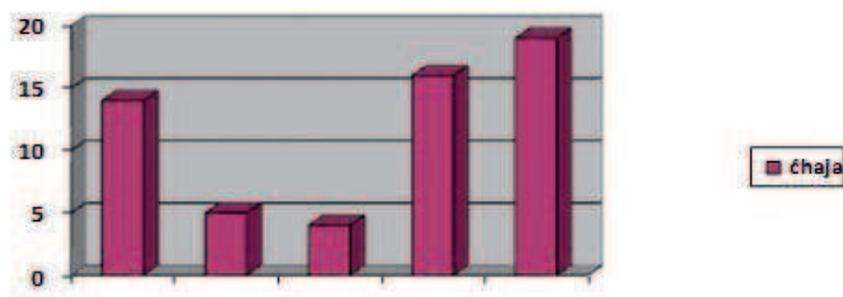
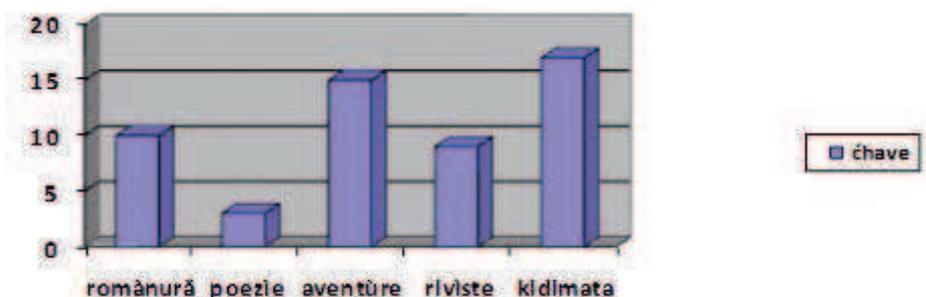
- Anθ-e savo beršesqo vaxt savorre çhave khelen pen maj but ka-o kompùtero?
- K-o savo beršipen e çhave bèsen maj but anglal o kompùtero?
- Maškar e çhave e beršipnaça 11 thaj 12 berša save khelen pen maj but k-o kompùtero, si maj but çhave vaj maj but çhaja?

| | O anglomilaj | O milaj | O angloived | O ivend |
|-------------------------------------|--------------|---------|-------------|---------|
| E çhavenqo totàlo gin | 324 | 269 | 408 | 526 |
| E çhajanqo gin: 11- 12 berša | 63 | 49 | 58 | 94 |
| E çhajanqo gin: 13- 14 berša | 82 | 75 | 89 | 108 |
| E çhavenqo gin: 11- 12 berša | 77 | 62 | 100 | 133 |
| E çhavenqo gin: 13- 14 berša | 102 | 83 | 161 | 191 |

- Anθ-o telutno tabèlo si sikavde o gin thaj fàlo e lilenqe save si line anθ-jekh kurko e siklövnenθar anθar i eftato klàsa kaθar e školaqi bibliotèka

| | romànură | poezie | aventùre | riviste | kidimata |
|--------------|----------|--------|----------|---------|----------|
| çhave | 10 | 3 | 15 | 9 | 17 |
| çhaja | 14 | 5 | 4 | 16 | 19 |

E dàte anθar o tabèlo šaj te aven reprezentisarde anθ-e diagràme, kadja:



- **Dikhen** thaj keren e datenqi komparàcia, palal kodoja ambolden!
 - Kon lias maj but romànură?
 - Kon lias maj cira poezienqe lila?
 - Save si e maj drabarde lila?
- Thon vi aver puçhimata, utilizarindoj e opralutne diagràme!



Keren butí khethanes!

- Keren diagràme palal o telutno tabèlo anθ-o savo si prezentisarde e kamle discipline e çhavenqe anθar i trinto klàsa!

| | matemàtika | rromani | mùzika | çitro | spòrto |
|-------|------------|---------|--------|-------|--------|
| çhaja | 12 | 17 | 19 | 9 | 8 |
| çhave | 15 | 11 | 6 | 13 | 14 |

- Xramosaren e evaluaciaqe rezultàturà ka-i rromani çhib, matemàtika thaj spòrto, dikhindoj e line kalifikatìvurà! Keren e datenqi komparàcia vaš e çhaja thaj vaš e çhave, thon puçhimata thaj palal kodoja keren diagràme!



9. Evaluàcia

1. Ginaven!

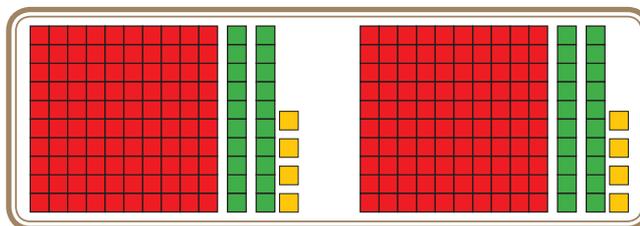
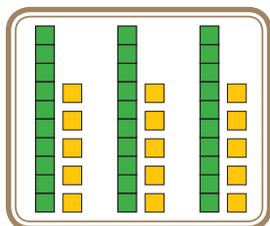
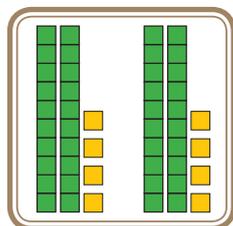
- a) 30×10 b) $600 : 10$ c) 82×10
 9×100 $600 : 100$ $820 : 10$

2. Ginaven anθar palemkerdo kideripen!

- a) 4×28 b) 3×250 c) 6×147

3. Arakhen e xulavimatenqo kīto, utilizisarindoj e dine çitre!

- a) $48 : 2$ b) $45 : 3$ c) $246 : 2$



4. Ginaven!

- a) $6 \times (2 + 7)$ b) $(43 + 21) : 8$
 $4 \times (9 - 3)$ $(55 - 25) : 6$

5. Le Mihajos sasas les 67 timbrurà. Vov thovdàs po 8 timbrurà pa-jekh patrin anθar jekh albùmo.

- a) Sode patrinà pherdàs?
 b) Sode timbrurà maj àchile lesqe?
 c) Sode timbrurà maj trebal lesqe kaj te pherel 10 albùmurà?

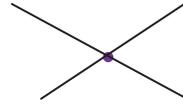
| Ìtemo | 1 | 2 | 3 | 4 | 5 |
|--------------|---------------------------|---------|---------|-------------------|---------|
| Kalifikativo | | | | | |
| Dòsta | a vaj b vaj c | a | a | 2 çáce ginavimata | a |
| Mišto | (a, b); (b, c) vaj (a, c) | a, b | a, b | 3 çáce ginavimata | a, b |
| But mišto | a, b, c | a, b, c | a, b, c | 4 çáce ginavimata | a, b, c |

VI. INTUITIVŌ GEOMETRIAŌE ELEMÈNTURĂ

1. Pùntură thaj lînie



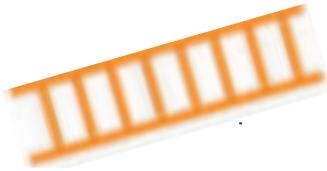
o pùnto



i vòrta lînia



I vòrta lînia si biagoresqi, dec šaj zinzarel pes kaj s-ol duj riga.

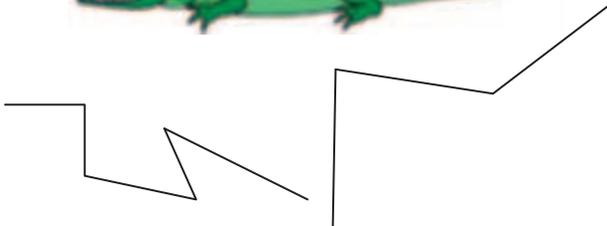


e vortaŋo kotor

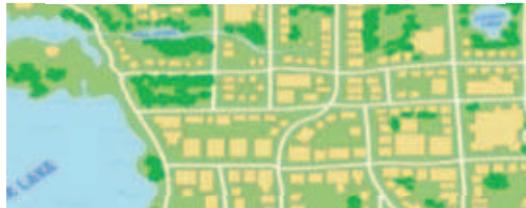


I čhindi lînia si biagoresqi, dec šaj zinzarel pes ke s-ol duj riga.

i čhindi putardi lînia



i čhindi putardi lînia



I bangărdi lînia si biagoresqi, dec šaj zinzarel pes ke s-ol duj riga.

i bangărdi putardi lînia

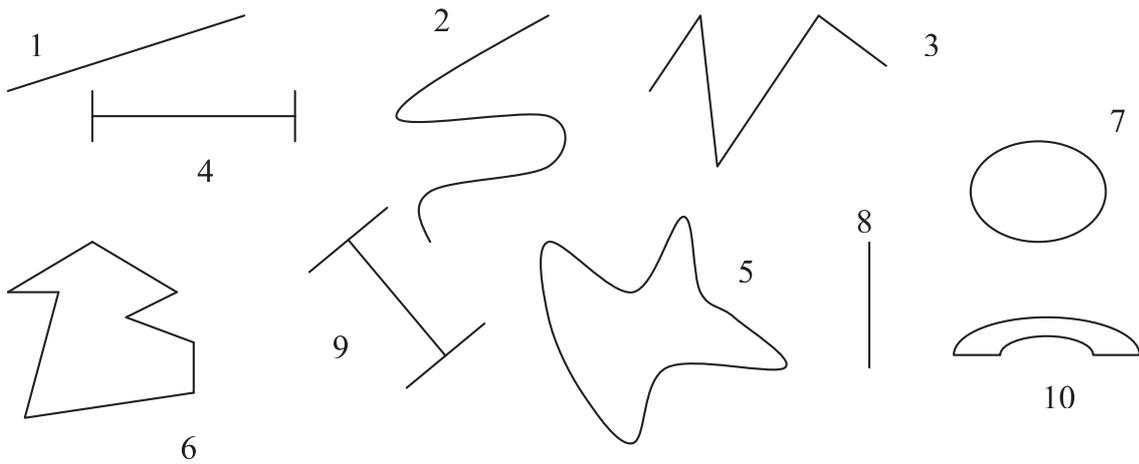


i bangărdi phandli lînia



Klasaqe butë!

1. Dikhen e çitre, xramosaren o tabèlo anθ-e štartorre thaj xramosaren e çitrenqo gin!



| e çitresqo anav | e çitresqo gin |
|-----------------|----------------|
| e vortaço kotor | 4; |
| bangärdi linia | |
| çhindi linia | |
| vërta | |

2. Çitren jekh vortaço kotor anθ-i òbliko pozìcia thaj jekh vërta anθ-i vertikàlo pozìcia!

3. Keren:

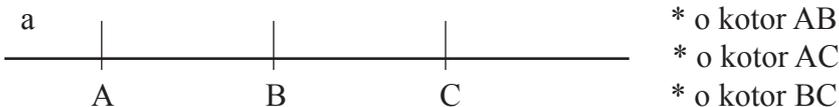
- a) jekh çhindi putardi linia kerdi anθar 5 kotora;
- b) jekh çhindi phandli linia kerdi anθar 4 kotora!

4. Dikhen e grafème opral i phal. Phenen save si e grafème save si kerde nùmaj anθar:

- a) bangärde putarde linie;
- b) bangärde phandle linie;
- c) çhinde linie.



5. Dikhen e vortaço kotora save šaj te drabaren pen p-i vërta a.



• Save vortaço kotora šaj te drabaren p-i vërta b?

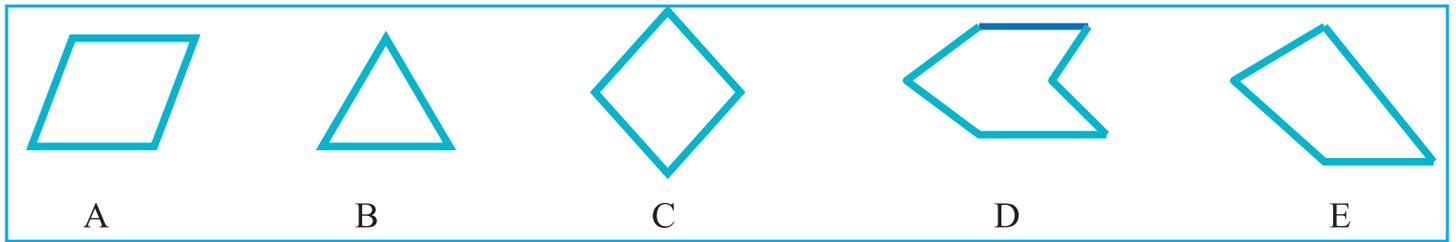


KHELIPEN! Dikhen e çitre! Xramosaren anθ-e štartorre, thaj palal kodoja ingeren maj dur o modèlo! Keren vi aver modèlurà!



2. Poligònură

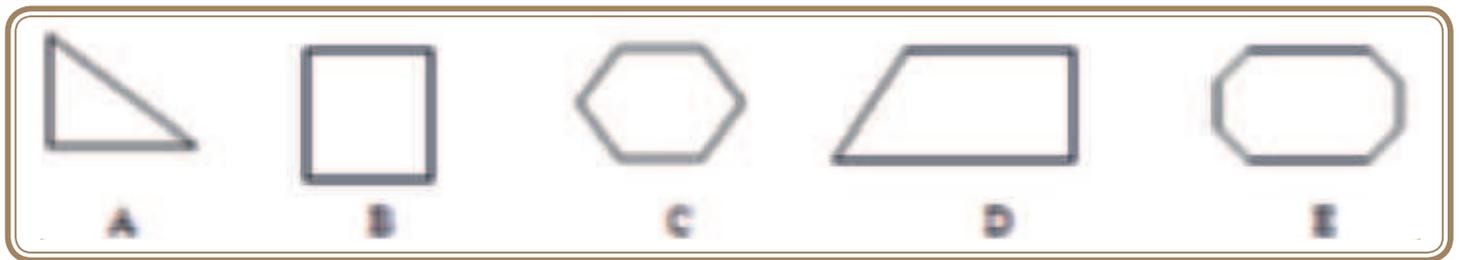
• I Mihaela kerdäs anθar rovlörrä e avutne čhinde phandle linie:



• Sode rovlörrä utilizisardä vaś sväko keripen/čitro?

• **Arakhen!**

Anθar sode vortaqe kotora si kerdi sväko čhindi linia anθar e telutne čitre?



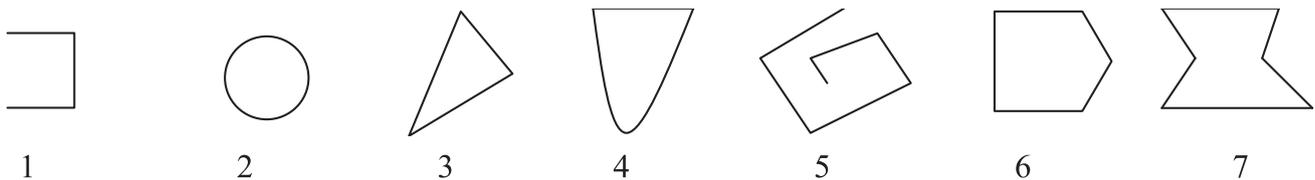
Inkeren godăθe!

I čhindi phandle linia anavărel pes poligòno.

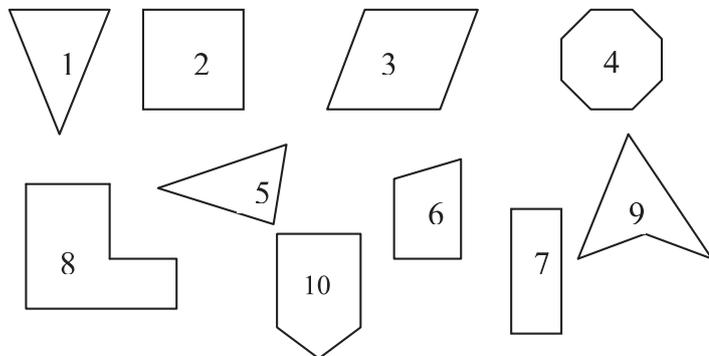
E vortaqe kotora anθar save si kerde jekh poligòno si e poligonosqe lătore/riga.

Klasaqe bută!

1. Phenen save maśkar e telutne čitre si poligònură!



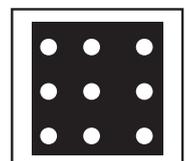
2. Dikhen e poligònură thaj palal kodoja pheren anθ-e śtartorre o tabėlo!



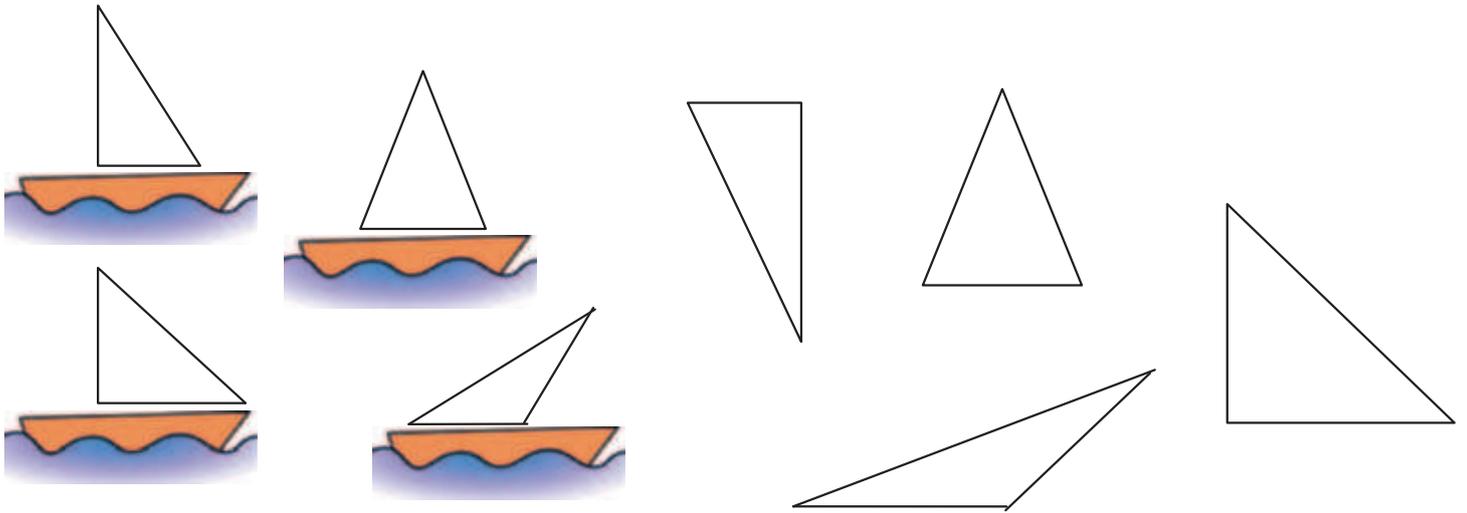
| Poligòno | E poligonosqo gin |
|-------------|-------------------|
| 3 laturănça | 1 |
| 4 laturănça | |
| 5 laturănça | |
| 6 laturănça | |

• Śaj te keren jekh poligòno maj cıra/zăla/xancı trine laturănça?

3. Khethanindoj e pùntură palal i phal, keren vever poligònură save te aven len 3 vaj 4 lătore. Vaś sväko poligòno, čitren anθ-e śtartorre jekh aver phal sar i dini phal!



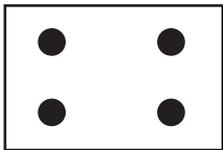
3. O trianglo



- So khethane karakteristike si k-e poligònură save si cítrărde maj opre?

Inkeren godăthe! O poligòno trine laturănça/rigença anavărel pes trianglo/trinrigalo.

- Sode pùnttură palal i phal trebal te aven khethanărde kaj te kerel pes jekh trianglo.



Interesànto! E trianglosqe šere si pùnttură!

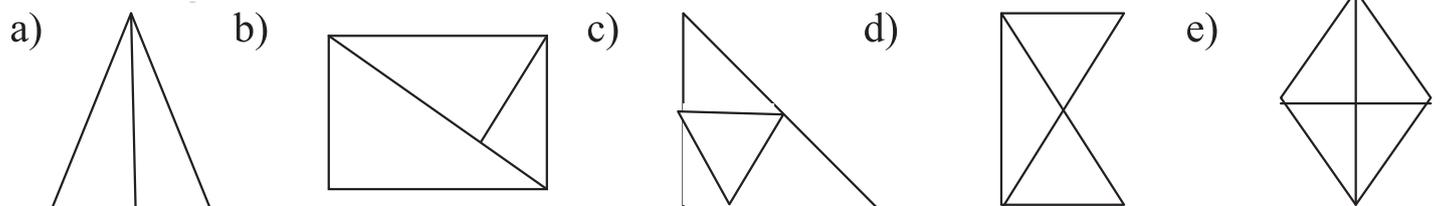


Klasaqe bută!

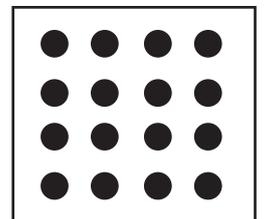
1. Keren 3 triangle anθar angarne, dikhindoj k-e mangimata:

- a) utilizisar 3 angarne sakodole lunžipnaça;
- b) utilizisar 2 angarne sakodole lunžipnaça thaj jekh angarno avere lunžipnaça;
- c) utilizisar 3 angarne ververe lunžimatença!

2. Sode triangle si anθ-o svàko maškar e telutne cítre?



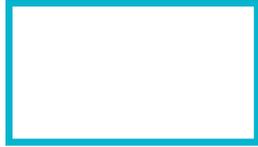
3. O Kristiàn utilizisardäs 9 rovlòrră kaj te kerel jekh geometrikano cítro. P-i svàko rig e geometrikane cítresqi thovdäs po 4 rovlòrră. So cítro kerdäs?



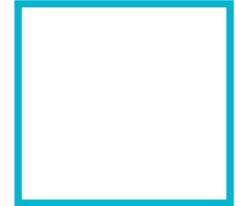
4. Cítren anθ-e štartorre trin phala sar i avutni phal. Khethanären e pùnttură kaj te keren svakone phalăthe jekh trianglo, verver kolaverenθar!

4. O dreptungio thaj o starigalo

- Utilizarindoj e rovlörrä, i Alina thaj i Daniëla kerde poligönrä.



- Sode rovlörrä utilizarindäs sarkon éhajorri?
- So ververipen si maškar e rovlörrä save utilizarindäs len i Alina thaj kolaver kaj utilizarindäs len i Daniëla?



E dreptungiosqe lätüre si barabar/ egàlo duj po duj.

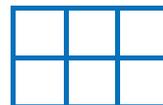
E starigalesqe lätüre si len sakodova lunžipen.

Klasaqe bută!

1. Le Alinos si les 10 rovlörrä sakodole lunžipnasqe. Savo si o minimo rovlörränço gin save trebal te utilizarinel len kaj te avel kerdo jekh dreptungio?

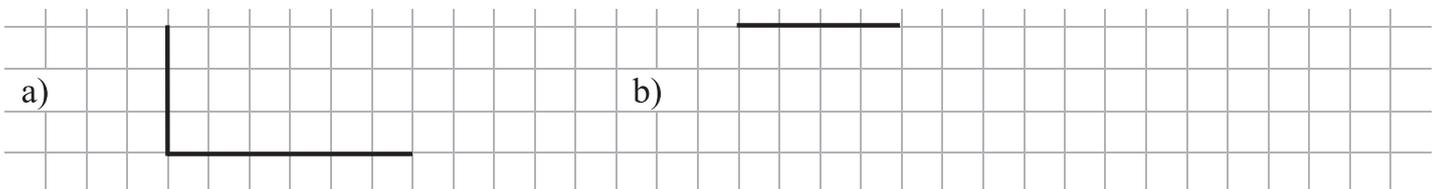
- So cítro šaj te kerel e savorre áchile rovlörränça?

2. Sode starigale si an0-o cítro? Tha` dreptungiurä?



3. Xramosaren an0-e šartorre, palal kodoja pheren svàko cítro kaj te kerel:

- a) jekh dreptungio; b) jekh starigalo.



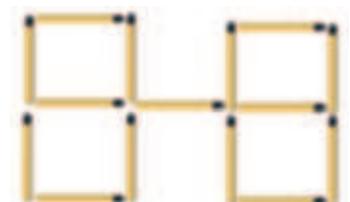
4. Utilizarindoj 12 rovlörrä egalone lunžimatença, kerel:

- a) 3 starigale; b) 2 dreptungiurä; c) jekh baro starigalo thaj jekh tikno starigalo.

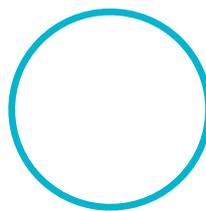
Keren an0ar kibrituränqe rovlörrä jekh cítro sar o telutno cítro!

Paruven duj rovlörrä kaj te kerel 5 starigale!

Keren butı khethanes tumare kolegoça!



5. I truj



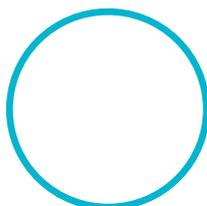
- Den eksèmplurà objekturenqe save miazon jekhe trujeça!
 - Lien jekh monèda! Thon la p-o štartorro thaj trujaren la le angarneça!
- So geometrikani figùra kerde?
- **Dikhen** sar cítrel i Maria jekh truj.



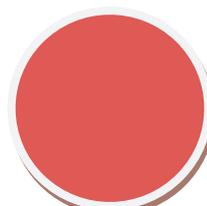
Xatàrdem! Thovdàs jekh karfin anθ-jekh fikso than thaj trujal lesθar cirdel jekh bangàrdi phandli linia e angarneça!



- So kerel i çhaj?



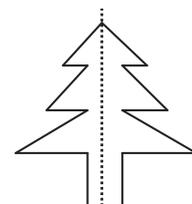
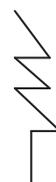
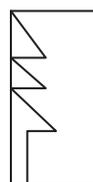
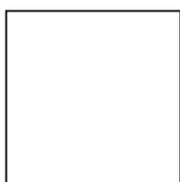
truj



disko

- **Dikhen** sar kerdàs i Ana jekh papirosqo bràdo!

- a – Bangàrdàs o papìri.
- b – Çitrisardàs o brado.
- c – Çhindàs palal o kontùro.
- d – Putardàs o papìri.



a.

b.

c.

d.

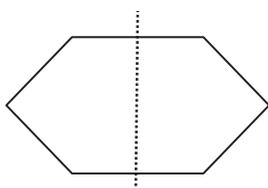
E simetriaqi linia

Inkeren godàθe!

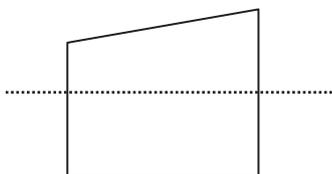
I vòrta palal savi bangàrel pes jekh cítro, kadja ke e duj cítresqe kotora uçaraven pen jekh kolaveres, anavàrel pes e simetriaqi àksa.

Klasaqe butà!

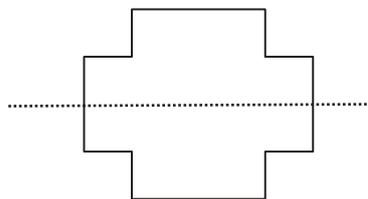
1. Anθ-e save anθar kadala cítre i punktisardi vòrta si simetriaqi àksa?



a)

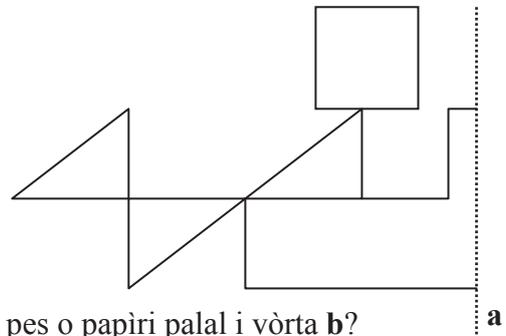


b)

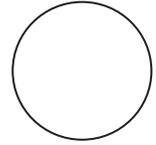
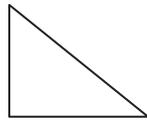
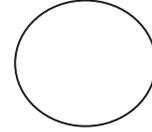
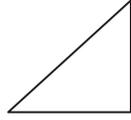
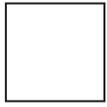


c)

2. Xramosaren anθ-e štartorre o telutno ćitro, palal kodoja pheren o ćitro anθ-i ćaći rig, kadja kaj i vòrta **a** te avel e simetriaqi àksa vaś o kerdo ćitro!

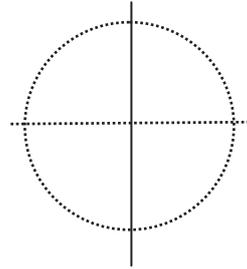
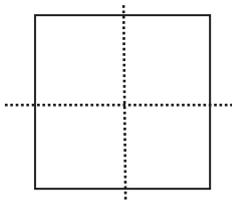


3. Save si e geometrikane ćitre save ućharaven pen, kana bangărel pes o papiri palal i vòrta **b**?



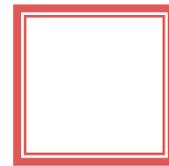
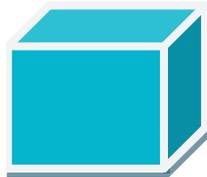
KHELIPEN!

Ćhinen jekh rangărdò kotor papiri sar jekh štorigalo thaj aver kotor sar jekh truj! Bangăren svăko ćitro dujvar, kadjal ke e kerde kotora te ućharaven pen jekh kolaveres, palal kodoja ćhinen len kaj te keren simetrikane khosne!



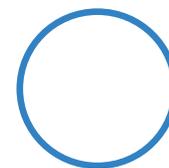
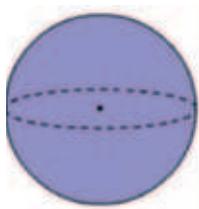
6. Geometrikane kòrpură

• So fòrma si k-e objèktură anθar ćitre?



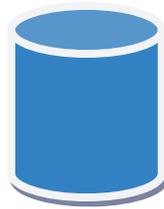
kùbo

štorigalo



sfèra

truj



cilindro

Thon jekh cilindro p-o štartorro thaj óitren e mujesqo kontùro p-o savo bešel!
So geometrikani figùra kerde?



kòno

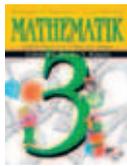
So fòrma si le mujes p-o savo bešel o kòno?



kuboido

Klasaqe bută!

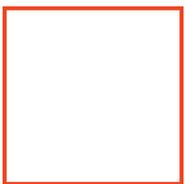
1. Phenen saveça anθar e geometrikane kòrpură miazon svàko maškar e telutne objèktură!



2. Xramosaren anθ-e štartorre e geometrikane korpurenqo anav anθar o telutno grùpo:



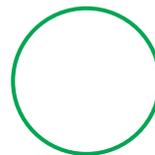
3. O Doru thovdăs p-o kíšaj varesode geometrikane kòrpură. Kana vov vazdăs len, p-o kíšaj ačhile e vùrme. So fòrma lien e kòrpură?



a)

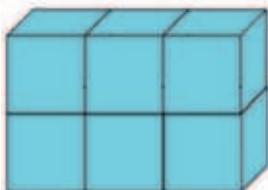


b)



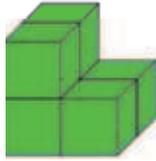
c)

4. Sode kùbură si anθ-o svàko kuboido?

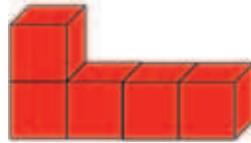


5. Savo si o minimo kuburenqo gin kaj trebal thovdino anθ-e svàko keripen kaj te kerel pes:

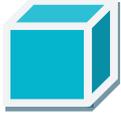
a) jekh kùbo;



b) jekh kuboido.



6. Dikhen e geometrikane ÷itràrde kòrpurà thaj pheren anθ-e štartorre o tabèlo!

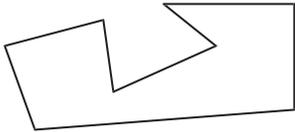


| | |
|-----------------------------------|--|
| del pes pa sèresθe | |
| si les e muja sar jekh štartigalo | |
| si les e muja sar jekh dreptùngio | |
| si les e muja sar jekh truj | |

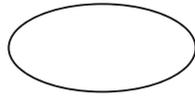


7. Evaluàcia

1. Xramosaren e telutne geometrikane formenqo anav!



a)



b)

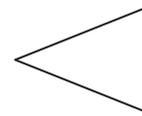


c)

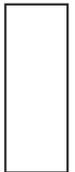
d)



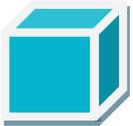
e)



f)



2. Xramosaren anθ-o tabèlo o trebutno gin vaš svàko geometrikano kòrpo!



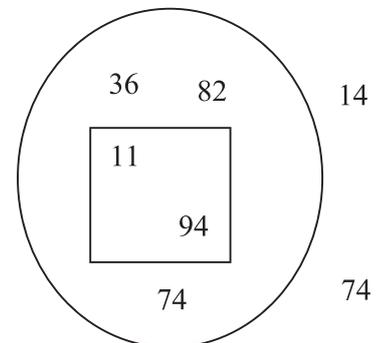
| o anav | kòno | kùbo | cilindro | sfèra |
|--------|-------|-------|----------|-------|
| o gin | | | | |

3. Xramosaren anθ-e štartorre thaj palal kodoja xramosaren e geometrikane korposqe anava:

a) O kòrpo savorre mujença štartigale si

b) Si les duj muja sar jekh truj

c) Si les jekh muj sar jekh truj



4. Dikhen o ÷itro palal kodoja xramosaren e gina save si:

a) anθ-o štartigalo;

b) avräl e trujäθar;

c) anθ-i truj;

d) avräl e štartigalesθar.

| Ìtemo | 1 | 2 | 3 | 4 |
|--------------|--------------------|----------------------------------|---------------------------|------------|
| Kalifikativo | | | | |
| Dòsta | 4 ÷áce amboldimata | prinzarel 2 geometrikane kòrpurà | a vaj b vaj c | a, b |
| Mišto | 5 ÷áce amboldimata | prinzarel 3 geometrikane kòrpurà | (a, b); (b, c) vaj (a, c) | a, b, c |
| But mišto | 6 ÷áce amboldimata | prinzarel 4 geometrikane kòrpurà | a, b, c | a, b, c, d |

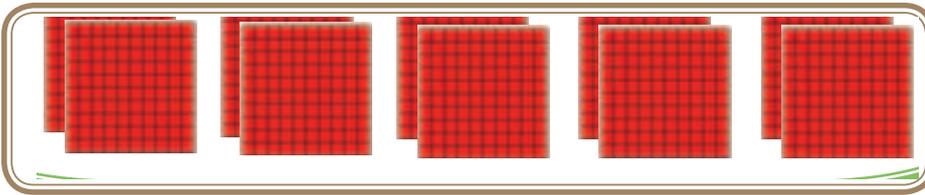
VII. E NATURALO GINA KAΘAR O K-O 1 000 000

1. E naturalo gina xramosarde štare cifrença



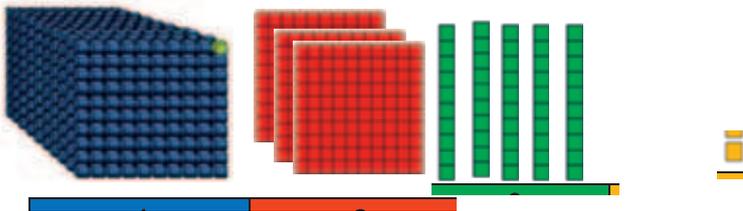
Te palemdikhas!

Žanas ke “deš jekhimata varesave ordinosqe” keren jekh jekhipen savo si les jekh oprutno pašutno òrdino.



deš šela keren jekh mìa

- **Dikhen** o reprezentisardo thaj xramosardo gin anθar o tabèlo!



| | | | |
|-----|------|------|-----------|
| 4 | 3 | 2 | 1 |
| mie | šela | deša | jekhimata |
| 1 | 3 | 5 | 2 |

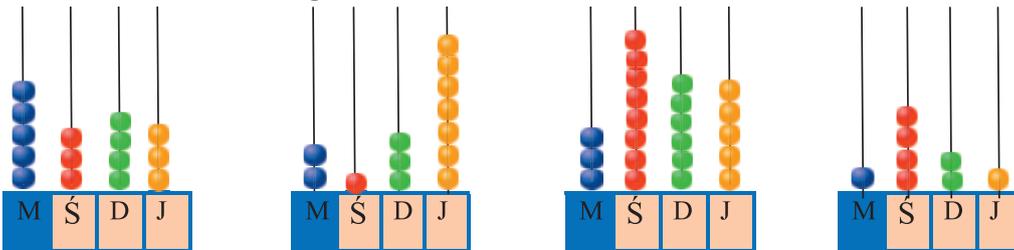
→ E ordinosqo gin
→ E ordinosqo anav

Inkeren godãthe!

O than anθ-o savo ačhel svàko ginesqi cifra reprezentisarel nesavo òrdino (kaθar i zervi k-i čači rig):

- O òrdino 1 si e jekhimatenqo òrdino.
- O òrdino 2 si e dešenqo òrdino.
- O òrdino 3 si e šelenqo òrdino.
- O òrdino 4 si e mienqo

- Drabaren e formisarde gina!



- Drabaren e xramosarde gina anθ-e ginavipnasqe tabèlurã! Phenen sode jekhimata anθar svàko òrdino si!

Barodikhipen!

E jekhimatenqo nanaipen kaθar nesavo òrdino si notisardo e cifraça 0, haj kana si drabardo o gin, kadava òrdino na si phendo.

| | | | |
|-----|------|------|-----------|
| mìa | šela | deša | jekhimata |
| 3 | 4 | 0 | 1 |
| 6 | 0 | 7 | 9 |
| 2 | 7 | 8 | 0 |

| | | | |
|-----|------|------|-----------|
| mìa | šela | deša | jekhimata |
| 4 | 5 | 9 | 0 |
| 6 | 3 | 0 | 8 |
| 7 | 9 | 0 | 3 |

Xramosaren anθ-jekh kasavo tabèlo e gina:

- 6472; 3 mie 721; 5001; 7 mie 30; jekh mìa 11.

2. E naturàlo gina xramosarde maj bute cifrença sar star

Si deš mie!



Xramosarel pes: 10 000

Drabarel pes: deš mie

Kathe si jekh šel mie!



Xramosarel pes: 100 000

Drabarel pes: jekh šel mie

Man si man vi maj but!
Si man jekh miliòno!

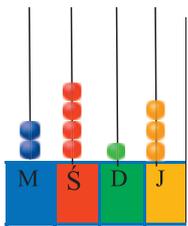


Xramosarel pes: 1 000 000

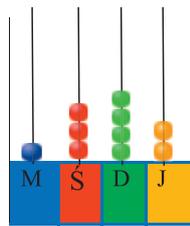
Drabarel pes: jekh miliòno



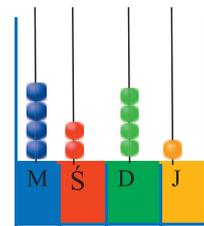
• **Dikhen** e ginenço representisaripen:



Xramosarel pes: 2 413
Drabarel pes: duj mie štar šela thaj dešutrin



Xramosarel pes: 1 342
Drabarel pes: jekh mia trin šela štarvardeš thaj duj



Xramosarel pes: 4 241
Drabarel pes: štar mie duj šela trãnda thaj jekh

3. O formisaripen, o drabaripen thaj o xramosaripen e naturalone ginenço zi k-o 1 000 000

• Kaj te xramosarel pes thaj te drabarel pes lokhipnaça e naturàlo gina, utilizisaras o telutno tabèlo:

| E mienqi klàsa | | |
|----------------|----------|---------------|
| 6 | 5 | 4 |
| šela mie | deša mie | jekhimata mie |
| | | 2 |
| | 8 | 4 |
| 3 | 6 | 0 |

| E jekhimatenqi klàsa | | |
|----------------------|------|-----------|
| šela | 2 | 1 |
| 4 | deša | jekhimata |
| 7 | 5 | 2 |
| 5 | 9 | 0 |
| 3 | 8 | 3 |

Inkeren godăthe! Jekhe ginesqo drabaripen kerel pes kaθar i zervi k-i ćaci rig: drabarel pes maj anglal svakone ordinosqo anav (śela, deśa, jekhimata), palal kodoja, klasaqo anav.

Eksèmplo: 52 427 drabarel pes: panzvardeś thaj duj miè śtar śela biś thaj efa.

Lien sàma! Na phenel pes e klasenqe thaj e ordinurenqe anava kana na si len nijekh jekhipen (si notisarde e cifraça 0). Ka-e ginenqo xramosaripen mukhel pes jekh tikno than maśkar e klàse.

• Xramosaras thaj drabaras e gina kadja:

Deś jekhimata nesave ordinosqe formisaren jekh oprutno ordinosqo jekhipen:

10 jekhimata = 1 deś;

10 deśa = 1 śel;

10 śela = 1 mià.

• E cifre saveña si xramosardo jekh gin reprezentisaren verver valòre, palal o than anθ-e savo arakhen pen anθ-e ginesqo xramosaripen.

Eksèmplo: 55 555

5 jekhimata = 5

5 deśa = 50

5 śela = 500

5 miè = 5 000

5 deśa miè = 50 000

• Xramosaren e gina anθar o tabèlo! Drabaren e gina thaj phenen so reprezentisarel i cifra 4 anθ-o svàko gin!

| E mienqi klàsa | | | E jekhimatenqi klàsa | | |
|----------------|---|---|----------------------|---|---|
| Ś | D | J | Ś | D | J |
| 2 | 6 | 3 | 6 | 4 | 3 |
| | 8 | 2 | 4 | 9 | 5 |
| 3 | 4 | 0 | 0 | 0 | 4 |

Klasaqe bută!

1. Phenen anθ-e save thana arakhel pes i cifra 2 thaj i cifra 6 anθ-e dine gina:

a) 264 150

b) 520 697

c) 645 102

706 213

973 026

786 254

2. Reprezentisaren p-o ginavipen gina:

a) deśutrin miè śov śela trānda thaj panz;

b) 724 miè 803.

3. Vaś e gina 543 782 thaj 401 050 phenen save si e cifre kaj arakhen pen p-o than:

a) e deśenqo;

b) e jekhimatenqo;

c) e deśe mienqo;

d) e mienqo;

e) e śele mienqo;

f) e śelenqo.

4. Drabaren e avutne gina thaj phenen p-o savo than si e cifre 2, 4, 7 thaj 9 anθ-o svàko gin:

a) 9472;

b) 2794;

c) 7249;

d) 4927;

e) 9274;

f) 7942.

• Arakhen anθar so miazon pen thaj anθar so ververären pen kadala gina!

5. Xramosaren cifrença e gina:

a) panz śela oxtovardeś thaj trin miè śtar śela eftavardeś thaj jekh;

b) oxto śela enāvardeś miè efa śela thaj deśujekh;

c) śtar śela oxtovardeś thaj oxto miè enă śela eftavardeś thaj śov!

6. Xramosaren po jekh gin kerdo anθar:

- a) mie, śela thaj jekhimata;
- b) mie, śela, deśa thaj jekhimata;
- c) śela mie, mie, śela!

7. Xramosaren cifrença savorre naturàlo gina:

- a) kaθar o 21 mie 998 zi k-o 22 mie 5;
- b) kaθar o 788 mie 593 zi k-o 788 mie 602;
- c) kaθar o 99 mie 989 zi k-o 100 000!

8. Jekh libraria kerdās jekh lilenço mangipen. E lilençe tìtulturā sas notisarde p-e umala, palal sar thavdel maj tele:

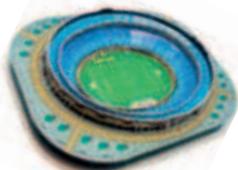
- kaθar o 9 000 k-o 10 456 – zanglimatenqe lila;
- kaθar o 10 457 k-o 10 948 – literaturaqe lila vaś çhave;
- kaθar o 10 949 k-o 11 052 – universalone literaturaqe lila;
- kaθar o 11 053 k-o 11 402 – artaqe lila;
- kaθar o 11 403 k-o 11 999 – historiaqe lila.

Phenen so subjèkto si k-e lila save si notisarde e ginença: 10 598; 11 369; 11 867.

Den eksèmplurā trine ginenqe anθar e dine umala!

4. I komparàcia thaj o laçharipen e naturalone ginenço zi k-o 1 000 000

• Anθ-jekh fòros si duj stadiònurā. Anθ-jekh si 32 471 thana, haj anθ-o kolaver si 32 627 thana. Savo stadiòno si maj baro?



Keras i komparàcia e duje ginenqi:

| mie | | | jekhimata | | |
|-----|---|---|-----------|---|---|
| Ś | D | J | Ś | D | J |
| | 3 | 2 | 4 | 7 | 1 |
| | 3 | 2 | 6 | 2 | 7 |



- Sode cifrença si xramosardo svāko gin?
- Keras i komparàcia e cifrenqi valorenqi kaj si len sakodova òrdino.
- Dikhas so e gina si len sajekh cifre p-e deše mienqo than thaj p-e mienqo than.
- Keras i komparàcia e cifrenqi valorenqi kaj si p-e śelenqo than: $4 < 6$.
- Xramosaras $32\,471 < 32\,627$.

Te palemdikhas!

Kana e gina si xramosarde ververe cifrenço gineça, si maj baro o gin savo si les maj but cifre.

Eksèmplo: $4\,625 < 23\,739$

Klasaqe butā!

1. Xramosaren e ginenqe zute, palal kodoja keren i komparàcia, utilizisarindoj e sèmnurā $<$, $=$, $>$.

- a) 5 083 thaj 5 830; b) 38 004 thaj 48 000; c) 36 804 thaj 402 520;
- 361 000 thaj 82 284; 4 703 thaj 14 703; 349 508 thaj 349 520;
- 47 205 thaj 47 503; 8 120 thaj 8 220; 298 999 thaj 300 000.

2. Drabaren e gina anθar e dine kherorra. Vaś svāko gin, xramosaren anθ-e štartorre o anglogin thaj o avutno gin le kadalenqo.

63 804

74 770

39 526

99 999

3. Xramosaren anθ-i barārikani òrdina e gina:
 a) 43 578; 7 893; 57 000; 43 529; 899; 7 804.
 b) 30 003; 303 303; 3 003; 3 303; 33 303; 333 303.

4. Laçharen barārikanes e gina zuteça thaj tiknederikanes e gina bizuteça!
 24 583; 455 205; 8 529; 28 385; 28 524; 633 990; 8 902; 58 530.

5. Dikhen o tabèlo! Xramosaren anθ-e štartorre e forurenqe anava anθ-i tiknederikani òrdina dikhindoj e manušenqo gin!

| O fòros | E manušenqo gin |
|------------|-----------------|
| Timișoàra | 288 740 |
| Oràdea | 220 520 |
| Krajòva | 240 485 |
| Iàși | 270 200 |
| Bakău | 210 500 |
| Sibiu | 220 646 |
| O Baro Gav | 210 937 |

- Ambolden mujutnes:
 a) Save si e fòrurā anθ-e save ziven maj but sar 230 000 manuša?
 b) Save si e fòrurā anθ-e save ziven maj cīra/zālaga sar 220 000 manuša?
 • Arakhen thaj xramosaren e manušenqo gin anθar tumaro gav/ fòros!

6. Ginaven anθar 5 anθ-e 5 thaj xramosaren e gina:
 a) kaθar o 28 360 zi k-o 28 395;
 b) kaθar o 28 990 zi k-o 29 025;
 c) kaθar o 623 730 zi k-o 623 710!

7. Arakhen i rēgula thaj pheren e širurā inkā/vaze panze ginença!
 a) 823; 824; 825;
 b) 120 300; 120 400; 120 500;
 c) 69 765; 68 765; 67 765;

8. Xramosaren o maj tikno, palal kodoja o maj baro gin kerdo anθar 6 cifre!

9. Xramosaren o maj tikno, palal kodoja o maj baro gin savo šaj formisarel pes anθar e cifre: 9; 6; 5; 0; 3 thaj 1.

10. Utilizisarindoj jekhvar e cifre 9; 3; 0 thaj 7, xramosaren savorre gina save šaj te formisaren pen!



KHELIPEN!

Kon arakhel e cifre save nana-i vaš save e relācie te aven éaçe?

$$63 \square 28 > 63 \ 6 \ 42; \quad 528 \ 472 < 528 \ 4 \square 2$$

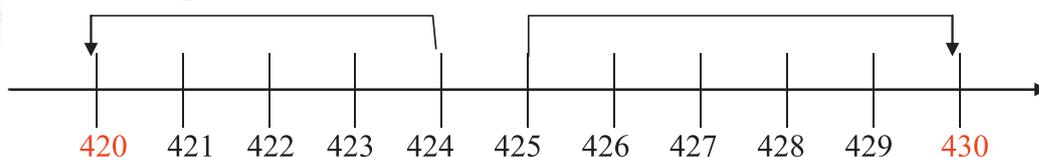
- Keren butī po duj zene anθ-i ekīpa. Komponisaren kasave ginavimata thaj mangel e kolegurenθar te rezolvisaren len!



5. O rotalisaripen e naturalone ginenqo maškar 0 thaj 1 000 000

Te palemdikhas!

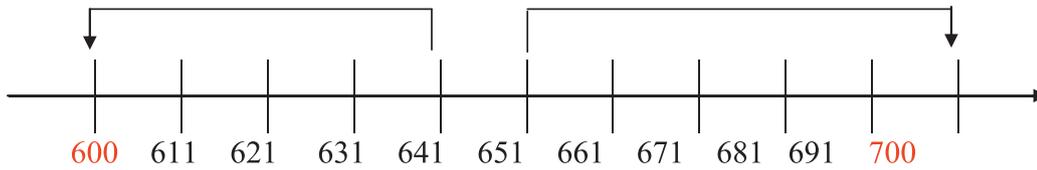
- Rotalisaripen ka-e deša



E gina 420; 421; 422; 423; 424 rotalisaren pen k-o 420, kodolesqe ke e jekhimatenqi cifra si la valòra maj tikni sar o 5.

E gina 425; 426; 427; 428; 429 rotalisaren pen k-o 430, kodolesqe ke e jekhimatenqi cifra si la valòra po cīra 5.

• Rotalisaripen ka-e šela



E gina 611; 621; 631; 641 rotalisaren pen k-o 600, kodolesqe ke e dešenqi cifra si la valòra maj tikni sar o 5.
E gina 651; 661; 671; 681; 691 rotalisaren pen ka-o 700, kodolesqe ke e jekhimatenqi cifra si la valòra po cira 5.

• Arakhen!



Ka-o palutno manušenqo ginavipen, anθ-o fòros Bukurèsti, sas ginavde 2 121 423 manuša.

2 126 423 rotalisardo ka-o òrdino

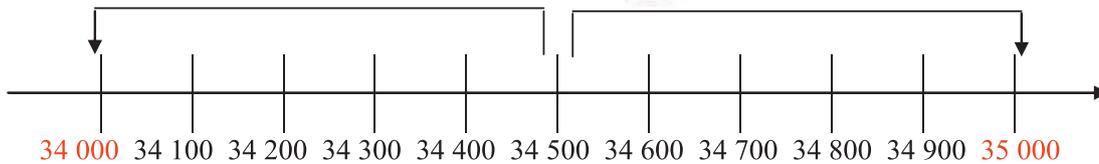
- e mienqo 2 121 000
- e deše mienqo 2 130 000
- e šele mienqo 2 100 000
- e milionurenqo 2 000 000

Na trebal te inkeres godāθε ekzàkto kadava gin, kodolesqe ke vov paruvdòl kaθar jekh dēs k-o aver.



Xatārdem! Šaj te inkerav godāθε oprutne-telutne valòre.

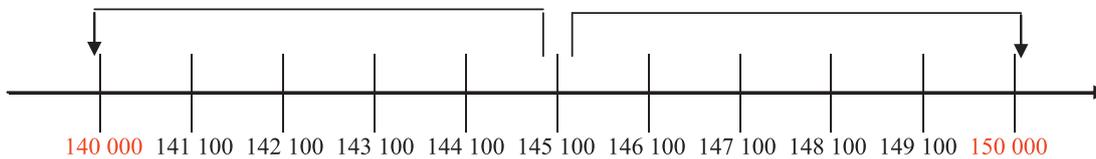
• Rotalisaripen ka-e mìa



E gina 34 100; 34 200; 34 300; 34 400 rotalisaren pen ka-o 34 000, sosθar ke e šelenqi cifra si la valòra maj tikni sar o 5.
E gina 34 500; 34 600; 34 700; 34 800; 34 900 rotalisaren pen ka-o 35 000, sosθar ke e šelenqi cifra si la valòra po cira egàlo e 5-ça.

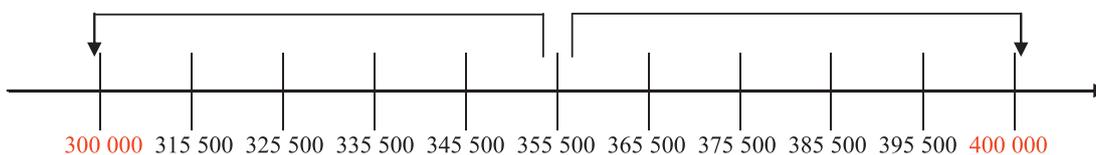
• Rotalisaren e gina ka-e mìa: 37 425; 53 823; 173 798.

• Rotalisaripen ka-e deša mìa thaj ka-e šela mìa



E gina 141 100; 142 100; 143 100; 144 100 rotalisaren pen k-o 140 000, sosθar ke e mienqi cifra si la valòra maj tikni sar o 5.
E gina 145 100; 146 100; 147 100; 148 100; 149 100 rotalisaren pen k-o 150 000, sosθar ke e mienqi cifra si la valòra po cira egàlo e 5-ça.

• Rotalisaren ka-e deša mìa e gina: 72 673; 137 124; 93 432.



E gina 315 500; 325 500; 335 500; 345 500 rotalisaren pen k-o 300 000, sosθar ke e deše mienqi cifra si la valòra maj tikni sar o 5.

E gina 355 500; 365 500; 375 500; 385 500 395 500 rotalisaren pen k-o 400 000, sosθar ke e deše mienqi cifra si la valòra po cira egàlo e 5-ça.

- Rotalisaren ka-e šela mìa e gina: 287 003; 623 350; 665 335.



6. O kideripen e naturalone ginenqo kaθar 0 k-o 10 000, bi te nakhel pes o òrdino

Te palemdikhas!

- Sigutne ginavipnasqe règule.

1. Kana paruvet pes e termenurenqi òrdina, I SÙMA ačhel sakadja.

Eksèmplo: $130 + 40 =$

$$\begin{array}{r} 40 \\ 130 \\ \hline 170 \end{array}$$

2. Kana si lačharde trebutnes duj tèrmenurà anθar jekh sùma maj bute termenurenqi, I SÙMA ačhel sakadja.

Eksèmplo: $275 + 368 + 125 =$
 $= (275 + 125) + 368 =$
 $= 400 + 368 =$
 $= 768$

3. O kideripen orsave ginesqo e 0-ça na paruvet e ginesqi valòra.

Eksemplurà: $0 + 524 = 524$
 $704 + 0 = 704$

• Arakhen!

$1\ 317 + 2\ 142 = ?$

| | | | |
|---|---|---|---|
| 1 | 3 | 1 | 7 |
|---|---|---|---|

 $+$

| | | | |
|---|---|---|---|
| 2 | 1 | 4 | 2 |
|---|---|---|---|

 $= 1000 + 300 + 10 + 7 + 2000 + 100 + 40 + 2$
 $= 3000 + 400 + 50 + 9$
 $= 3459$

| M | Š | D | J | | |
|---|---|---|---|---|--|
| 1 | 3 | 1 | 7 | + | |
| 2 | 1 | 4 | 2 | | |
| 3 | 4 | 5 | 9 | | |

1 ← Kidären pen e jekhimata: $7 + 2 = 9$
2 ← Kidären pen e deša: $1 + 4 = 5$
3 ← Kidären pen e šela: $3 + 1 = 4$
4 ← Kidären pen e mìa: $1 + 2 = 3$

- Keren e rezultatosqi verifikàcia:

$$1\ 317 + 2\ 142 = 3\ 459$$

Pròba: $1\ 317 +$

$$\begin{array}{r} 2\ 142 \\ \hline 3\ 459 \end{array}$$

Klasaqe bută!

1. Ginaven.

a) $4\ 000 + 500 + 20 + 8$
 $7\ 000 + 300 + 80 + 3$

b) $3\ 000 + 900 + 9$
 $6\ 000 + 70 + 4$

2. Xramosaren anθ-e štartorre, ginaven thaj keren i komparàcia, utilizisarindoj e trebutne sèmnurà!

a) $3\ 000 + 160 + 10$ $3\ 000 + 170$;

b) $5\ 000 + 430 + 9$ $5\ 000 + 1\ 000 + 9$;

c) $6\ 300 + 200 + 8$ $6\ 300 + 130 + 78$

Klasaqe bută!

1. Ginaven!

| | | |
|----------------------|----------------------|----------------------|
| a) $7\,900 - 4\,300$ | b) $3\,540 - 1\,330$ | c) $7\,805 - 6\,500$ |
| $4\,630 - 2\,330$ | $6\,985 - 5\,773$ | $5\,976 - 4\,425$ |
| $7\,987 - 5\,883$ | $4\,638 - 3\,415$ | $7\,957 - 5\,525$ |

2. Ginaven, thovindoj e gina jekh telal kolaver!

| | | |
|----------------------|----------------------|----------------------|
| a) $6\,749 - 3\,526$ | b) $7\,996 - 4\,600$ | c) $7\,805 - 5\,503$ |
| $2\,969 - 1\,905$ | $5\,776 - 3\,366$ | $1\,889 - 1\,778$ |

3. Arakhen e ginenqi diferënca: $8\,779$ thaj $6\,556$; $7\,645$ thaj $5\,433$; $9\,999$ thaj $8\,899$!

4. Arakhen e gina $1\,225$ -ença maj tikne sar svàko anθar e gina $3\,567$ thaj $6\,458$!

5. Arakhen e ginenqi diferënca anθar e avutne zute thaj keren e rezultatenqi verifikàcia, kerindoj i pròba!

4 296 thaj 2 163; 9 795 thaj 9 654; 6 759 thaj 5 728.

6. I diferënca maškar duj naturàlo gina si 220 . Jekh anθar lenθe si $5\,641$. Arakhen savo si kolaver gin! Sode resimata si?

7. Jekhe klasaqe siklòvne thovdine e lila p-e ràfturà. P-jekh ràfto thovdine $1\,275$ lila, haj p-aver 134 -ença maj cira lila. Thon jekh pučhipen kaj te rezolvisaren i problèma anθar:

- jekh operàcia;
- duj operàcie.

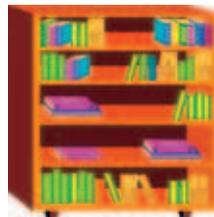
8. O kideripen e naturalone ginenqo kaθar 0 k-o 10 000, nakhindoj o òrdino

• Ka-jekh libreria sas andine $2\,856$ lila. Ginaven sode lila si anθ-o totàlo, zanindoj ke maj anglal sasas $1\,323$ lila anθ-i libreria!

$$2\,856 + 1\,323 = ?$$

$$\begin{array}{r} 1\,000 \leftarrow \\ 2\,000 + 800 + 50 + 6 + \\ 1\,000 + 300 + 20 + 3 \\ \hline 4\,000 + 100 + 70 + 9 = 4\,179 \end{array}$$

$$\begin{array}{r} \leftarrow 1 \quad \leftarrow 1 \\ \text{Proba: } 2\,856 + \quad 1\,323 + \\ \quad \quad 1\,323 \quad \quad 2\,856 \\ \hline \quad \quad 4\,179 \quad \quad 4\,179 \end{array}$$



Aplikisaras i siklilì règeula: nakhavas 10 jekhimata nesave ordinosqe anθ-jekh jekhipen oprutne ordinosqo.

Klasaqe bută!

1. Ginaven e kiderimata, thovindoj e gina jekh telal kolaver.

| | | |
|----------------|-------------------|----------------------|
| a) $744 + 523$ | b) $1\,965 + 420$ | c) $3\,245 + 4\,773$ |
| $259 + 900$ | $2\,425 + 3\,365$ | $1\,894 + 1\,563$ |

2. Ginaven, palal o dino modèlo.

| | |
|----------------------------------|-------------------------------------|
| $1\,236 + 9 = (1\,236 + 10) - 1$ | $1\,236 + 90 = (1\,236 + 100) - 10$ |
| $= 1\,246 - 1$ | $= 1\,336 - 10$ |
| $= 1\,245$ | $= 1\,326$ |

| | | |
|-----------------|-----------------|-----------------|
| a) $4\,369 + 9$ | b) $6\,546 + 9$ | c) $2\,748 + 9$ |
| $4\,369 + 90$ | $6\,546 + 90$ | $2\,748 + 90$ |

3. Arakhen e ginenqe sùme: 1 458 thaj 652; 4 781 thaj 329; 2 468 thaj 444. Keren i verifikàcia, utilizisarindoj i pròba anθar o kideripen!

4. K-e ginenqi sùma 2 856 thaj 1 173, maj thon o avutno gin 1879!

5. Xramosaren anθ-e štartorre thaj pheren e kherorra e trebutne cifrença!

a)
$$\begin{array}{r} 267\boxed{} + \\ 3\boxed{}74 \\ \hline 6347 \end{array}$$

$$\begin{array}{r} 3574 + \\ 4\boxed{}\boxed{}7 \\ \hline 831\boxed{} \end{array}$$
 b)
$$\begin{array}{r} \boxed{}24\boxed{} + \\ 836 \\ \hline 5\boxed{}\boxed{}3 \end{array}$$

$$\begin{array}{r} 53\boxed{}6 + \\ 469 \\ \hline 574\boxed{} \end{array}$$

6. Arakhen e našipnasqo dromesqo lunžipen utilizisardo e çhajanθar thaj e çhavenθar!

| |
|-------------------------|
| 460 m |
| 200 m ÇHAJA 200 m |
| 460 m |

| |
|-------------------------|
| 460 m |
| 220 m ÇHAVE 220 m |
| 460 m |

• Dikhindoj e dàte anθar o çitro, thon vi aver puçhimata!

9. O tiknederipen e naturalone ginenqokaθar 0 la 10 000, nakhindoj o òrdino

• Vaš jekh fotbalosqo khelipen bikinde pen 1860 bilèturà. Arakhen e bileturenqo gin save na sas bikinde, zanindoj ke p-o stadiòno si 3 660 thana!

$3\ 660 - 1\ 860 = ?$

Sar ginavas?

Sar keras i verifikàcia?

a) anθar tiknederipen b) anθar kideripen

$$\begin{array}{r} 3\ 360 - \\ 1\ 860 \\ \hline 1\ 500 \end{array}$$

| | |
|--|--|
| $\begin{array}{r} 3\ 360 - \\ 1\ 500 \\ \hline 1\ 860 \end{array}$ | $\begin{array}{r} 1\ 500 + \\ 1\ 860 \\ \hline 3\ 360 \end{array}$ |
|--|--|



1. Ginaven!

| | | | | |
|---|---|---|---|---|
| $\begin{array}{r} 8\ 057 - \\ 3\ 635 \\ \hline \boxed{} \end{array}$ | $\begin{array}{r} 7\ 359 - \\ 2\ 827 \\ \hline \boxed{} \end{array}$ | $\begin{array}{r} 6\ 580 - \\ 1\ 940 \\ \hline \boxed{} \end{array}$ | $\begin{array}{r} 9\ 079 - \\ 5\ 467 \\ \hline \boxed{} \end{array}$ | $\begin{array}{r} 5\ 568 - \\ 3\ 867 \\ \hline \boxed{} \end{array}$ |
|---|---|---|---|---|

2. Ginaven, palal o dino modèlo!

$$1\ 635 - 9 = (1\ 635 - 10) + 1$$

$$= 1\ 625 + 1$$

$$= 1\ 626$$

$$1\ 635 - 90 = (1\ 635 - 100) + 10$$

$$= 1\ 535 + 10$$

$$= 1\ 545$$

a) $4\ 565 - 9$
 $4\ 565 - 90$

b) $7\ 543 - 9$
 $7\ 543 - 90$

c) $3\ 747 - 9$
 $3\ 747 - 90$

3. Xramosaren anθ-e štartorre thaj pheren e kherorra e trebutne cifrença!

a)
$$\begin{array}{r} 2\boxed{}75 - \\ \boxed{}38\boxed{} \\ \hline 987 \end{array}$$
 b)
$$\begin{array}{r} \boxed{}\boxed{}5\boxed{} - \\ 4\boxed{}7 \\ \hline 3391 \end{array}$$
 c)
$$\begin{array}{r} \boxed{}2\boxed{}7 - \\ 4\boxed{}3\boxed{} \\ \hline 2945 \end{array}$$

4. Arakhen e biprinzarde gina!

$8\ 673 - a = 3\ 792$ $b - 3\ 456 = 678$ $3\ 105 + c = 4\ 203$

5. Jekh trèno telàrel anθar i gàra 1 386 manuşença. K-o jekhto açhavipen den pen tele 492 manuşa thaj inklòn 364 manuşa. K-o dujto açhavipen den pen tele 386 manuşa thaj inklòn 205. Sode manuşa si anθ-o trèno?

Rekomendàcia: Ginaven utilizisarindoj i telutni skèma!

Giravipen

Aresipen





10. Evaluàcia

1. Xramosaren e naturàlo gina maškar:

- a) 6 892 thaj 6 907; b) 5 006 thaj 4 998; c) 9 898 thaj 9 908.

2. Keren i komparàcia e ginenqi, utilizisarindoj e sèmnurà: <; =; >.

- a) 73 000 thaj 37 000; b) 64 328 thaj 63 428; c) 888 888 thaj 88 888;
67 634 thaj 67 436; 680 573 thaj 680 575; 479 568 thaj 479 568.

3. Lačharen e gina:

- a) baràrikanes: 53 794; 3 506; 120 468; 9 534; 45 709;
b) tiknederikanes: 26 579; 269 750; 68 543; 608 543; 83 459; 813 573;
c) e gina bizuteça, maškar 23 593 thaj 23 607, kaθar o maj baro ka-o maj tikno!

4. Rotalisaren o gin 578 329 ka-e:

- a) šela mie; b) deša mie; c) mie.

5. Ginaven!

- a) $475 + 5\,313$ b) $2\,604 + 1\,645$ c) $7\,463 - 592 + 1\,285$
 $5\,964 - 4\,721$ $4\,880 - 2\,990$ $3\,468 + 2\,575 - 4\,574$

6. Arakhen e biprinzarde gina!

- $a + 729 = 5\,230$ $1\,960 - b = 470$ $c - 588 = 3\,016$

7. Jekh tèrmeno si 1 560, o dujto si 890-ça maj tikno sar o anglutno, haj o trinto tèrmeno si 880-ça maj baro sar o dujto. Arakhen e trine termenurenqi sùma!

| Itemo / Kalifikativo | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|---------|---------|---------|---------|---------|---------|------------------------|
| Dòsta | a | a | a | a | a | a | jekh tèrmeno |
| Mišto | a, b | duj tèrmenurà |
| But mišto | a, b, c | pherdo rezolvisari-pen |

VIII. MAIPNASQJE JEKHIMATA

1. E naturàlo gina xramosarde štare cifrença



Te palemdikhas!

- Dikhen e éitre thaj ambolden mujutnes!
- Kon si o maj uço anθar i familia?
- Kon si maj tikno, o éhavo vaj i éhaj?
- Kon si maj uço sar i màmi?



Bistandàrdo jekhimata

Inkeren godăthe! Kaj te na resen ka-e verver rezultatură atunc kana mapinen e butanqo lunzipen, e manusa kerde mapipnasqe jekhimata save utilizisaren pen anθ-i savorri lumja. O serutno mapipnasqo jekhipen vaθ o lunzipen si o met̄ro, notisardo **m**.

- Anavaren e instrumentură utilizisarde vaθ e lunzimatenqo mapipen.



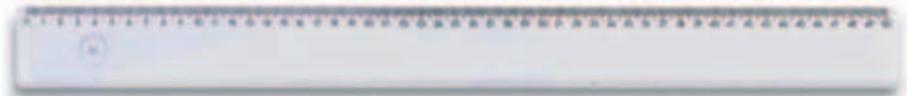
Praktiko aktiviteta

Keren jekh metro anθar dori, palal kodoja mapinen thaj xamosaren anθ-e startorre:

- E kovoresqo lunzipen anθar i livni;
- E skolaqo buxlipen;
- E siniaqo lunzipen;
- E raftosqo ucipen anθar i klasa.

2. E metrosqe tel-multiplură

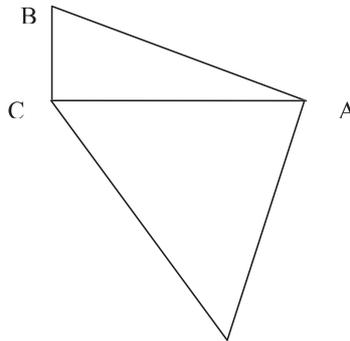
- Dikhen** e mapipnasqe jekhimata maj tikne sar o met̄ro



Inkeren godăthe! E metrosqe tel-multiplură si o decimet̄ro, o centimet̄ro thaj o milimet̄ro.

Klasaqe bută!

1. Mapinen e citrade segmenturenqo lunzipen thaj pheren o tabelo!



| Segmentură | cm | mm |
|------------|----|----|
| AB | ? | ? |
| BD | ? | ? |
| CD | ? | ? |
| AD | ? | ? |
| BC | ? | ? |

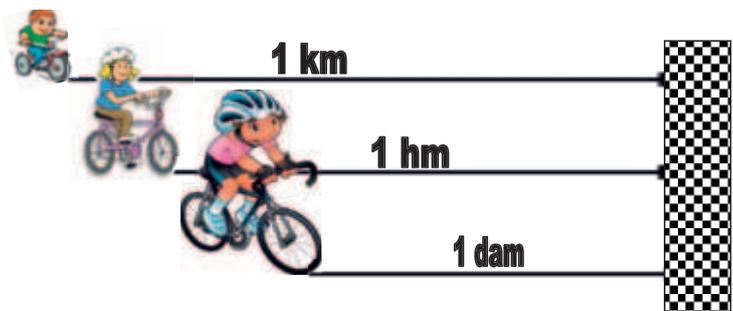
2. Anθ-o telutno tabelo si notisarde e line rezultatură kaj jekh atletismosqo konkurso, k-i prōba “o xutipen anθ-o lunzipen” – čhave zi k-e 12 berša. Keren i komparacia e rezultaturenqe thaj keren e proba qo klasamento!

| | | | | | |
|----------------|----------------|----------------|----------------|----------------|----------------|
| Alin | Mihaj | Doru | Kristi | Sorin | Kătălin |
| 2 m thaj 68 cm | 2 m thaj 90 cm | 3 m thaj 30 cm | 3 m thaj 68 cm | 3 m thaj 64 cm | 2 m thaj 90 cm |

3. Alosaren maθkar tumare khelnorre verever tiposqe trēnură. Mapinen lenqo buxlipen thaj arakhen kana řaj nakhenas anθar jekh tunelo e buxlipnaça 15 cm thaj uço 20 cm!

3. E metrosqe multiplură

- Anθ-jekh biciklenqi kūr̄sa, e čhave zanen so durăripen maj si te keren zi k-o agor, dikhindoj e sikavimata kaj si p-o drom.
- Dikhen** thaj **arakhen** so lunzipen maj si te kerel sarkon čhavo!



Inkeren godăthe!

E metrosqe multiplură si o dekamet̄ro, o hektomet̄ro, o kilomet̄ro.

| E mapipnasqe jekhimatenqo anav | met̄ro | dekamet̄ro | hektomet̄ro | kilomet̄ro |
|--------------------------------|--------|------------|-------------|------------|
| O xarno xamosaripen | m | dam | hm | km |

1 dam = 10 m

1 hm = 100 m

1 km = 1 000 m

Klasaqe bută!

Anθ-o telutno tabèlo si notisarde e plajinenqe šera xramosarde anθ-i alfabetikani òrdina. Xramosaren e šerenqo anav, anθ-i tiknederikani òrdina lenqe ućipnasθar!

| E plajinesqo šero | Kilimanjaro | Everesto | Mont Blanc | Moldoveanu | Negoiu |
|-------------------|-------------|----------|------------|------------|--------|
| O ućipen anθ-e m | 5 895 | 8 848 | 4 810 | 2 544 | 2 535 |

2. O pani Olt nakhel anθar 7 žudècură zi kana čhordòl anθ-i Dùnäre thaj si les jekh lunžipen 615 km-enqo. Ginaven e Oltosqo lunžipen palal so kadava nakhel anθar e plajina, zanindoj ke zi anθ-e kodova than si les jekh lunžipen 273 km-enqo.

3. Jekhe klasaqe siklòvne gele anθ-i ekskùrsia k-o plajin kerindoj anθ-e trin dësà 1 480 km. Anθ-o anglutno dës gele 520 km, anθ-o dujto dës kerde 320 km-ença maj but sar anθ-o anglutno dës. Arakhen sode km kerde anθ-o trinto dës.

4. Mapipnasqe jekhimata vaš o volùmo/ šajnipen. O litro



Te palemdikhas!

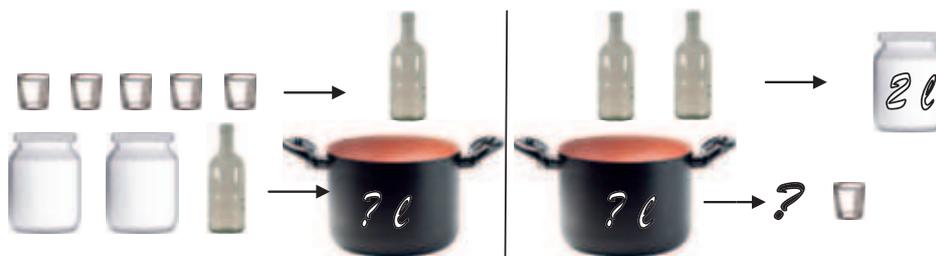


Jekhe beresqo volùmo arakhel pes mapindoj e thavdinesqi kantitèta kaj arese anθ-e lesθe.

Inkeren godăθe! O šerutno mapipnasqo jekhipen vaš e berenqo/čarenqo volùmo si **o litro, notisardo l.**

Pràktiko aktivitèta

• **Dikhen** e čitre thaj arakhen sode pherde taxtaja trebal čhorde kaj te pherel pes i piri!



• **Dikhen** e čitre, palal kodoja mapinen jekhe beresqo volùmo utilizisarindoj sar mapipnasqe jekhimata:

- jekhe litrosqi vojàga/valin;
- jekhe paše litrosqi valin;
- jekhe firtare litrosqi kući.

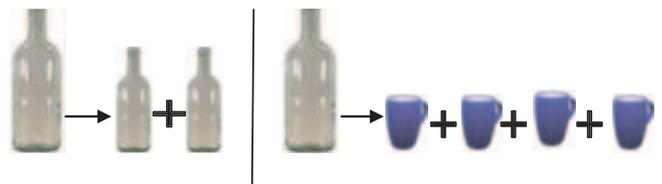
• Anglekeren tumenqe korkorre jekh pimos palal i avutni recèta:

- Xamisaren pen:
- jekh litrosqo firtari xum anθar grapefuito;
 - jekh paš litro portokalenqo xum;
 - jekh paš litro mineràlo pani.

So pimosqo koboripen kerde?

Na bistaren!

• Kaj te dujvaren i kantitèta/koboripen thaj te avel sakodova savipen/i kalitèta, trebal te dujvaren svakone thvadinesqi kantitèta!



5. E litrosqe tel-multiplură

- **Dikhen** e objëktură savença mapinen pen e maj tikne thavdinenqe kantitëte/koborimata!



Inkeren godăthe! E tel-multiplură e litrosqe si *o decilitro, o centilitro, o mililitro.*

| E mapipnasqe jekhimatenqo anav | litro | decilitro | centilitro | mililitro |
|--------------------------------|-------|-----------|------------|-----------|
| O xarno xramosaripen | l | dl | cl | ml |

$$1 \text{ l} = 10 \text{ dl}$$

$$1 \text{ l} = 100 \text{ cl}$$

$$1 \text{ l} = 1000 \text{ ml}$$

Klasaqe bută!

1. **Dikhen** e çitre thaj ambolden mujutnes!
Sode centilitrură si anθ-jekh paš litro portokalenqo xum?
Tha` anθ-jekh firtări litro?

2. **Prăktiko** aktivitetă

Xamisaren jekh paš litro xum anθar grapefuito jekhe litroça portokalenqo xumeça thaj jekh paš litro mineralone panëça.

Xramosaren e pimosqi kantitëta anθ-e:

- a) mililitrură;
- b) centilitrură;
- c) decilitrură.



3. Pa jekh vojagaqi etikëta anθ-i savi si phabajenqo siròpo, šaj te drabaras:

Anglekeripnasqo mòdo: k-i orsavi siroposqi kantitëta thol pes 5 var maj but pani.

- a) So kantitëta panësqi thol pes k-e 2 litrură siròpo?
- b) So kantitëta xumesqi kerel pes?



6. E litrosqe multiplură

- **Dikhen** o çitro, palal kodoja phenen soça šaj te ingeren pen maj bare koborimata/kantitëte thavdinenqe!

Inkeren godăthe!

E litrosqe multiplură si *o dekalitro, o hektolitro, o kilolitro.*

dujvarno dekalitro = ddal

$$1 \text{ ddal} = 2 \text{ dal} = 20 \text{ l}$$

| E mapipnasqe jekhimatenqo anav | litro | dekalitro | hektolitro | kilolitro |
|--------------------------------|-------|-----------|------------|-----------|
| O xarno xramosaripen | l | dal | hl | kl |

Klasaqe bută!

1. Arakhen so benzinaqo koboripen xaläs jekh vurdon, zanindoj ke anθ-o svăko kurko anθar e çhona jùnio thaj jùlio xaläs po 60 l, haj anθ-e kolaver çhona xaläs 35 l anθ-jekh kurko.

2. O dad kamel te nakhel i mol anθar jekh duruvli kaj si la 700 l anθ-e aver duruvlā 100 litrurānqe thaj 50 litrurānqe. Sode duruvlā trebalas lesqe? (Xramosaren savorre šajutnimata!).

3. K-jekh mariklilin/ kofetaria trebal 1 hl thud kaj te kerel pes jekh mariklānqi komānda. Zanindoq ke sas andine 9 bidōnurā po 10 litrurenqe, arakhen kana o andino thud si dōsta vaš i komānda!

7. Mapipnasqe jekhimata vaš e korpurenqo pharipen. O kilogrāmo

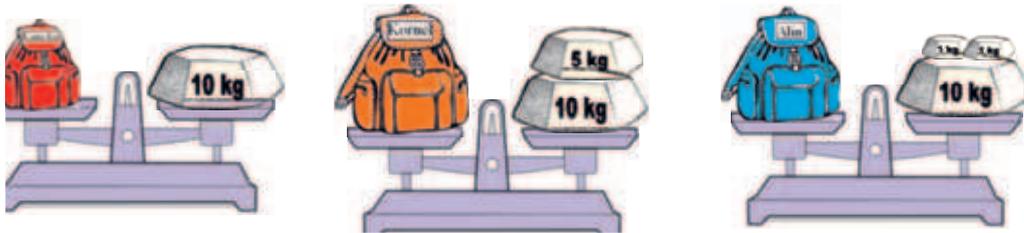
• O Alin, o Kornel thaj i Kamelia gele k-o plajin le gonorrença anθ-e dume. P-o drom, parujen e gonorre maškar penθe.



• **Dikhen** e tolā thaj phenen savo gonorro si o maj lokho thaj savo si o maj pharo!



• **Dikhen** e tolā thaj phenen sode tolārel svāko gonorro!



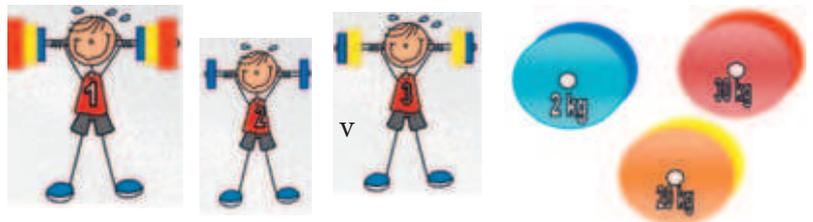
Inkeren godāθe! O šerutno mapipnasqo jekhipen vaš e korpurenqo pharipen si *o kilogrāmo, notisardo kg.*

• Anavāren e instrumenturā save labāren pen kaj te mapinel pes e korpurenqo pharipen:



Klasaqe butā!

• **Dikhen** e diskurānqo pharipen thaj ginaven sode vazdās sarkon halterofilo! Phenen, kon si o anglutno kadale konkursosθe?



8. E kilogramosqe tel-multiplurā

Inkeren godāθe!

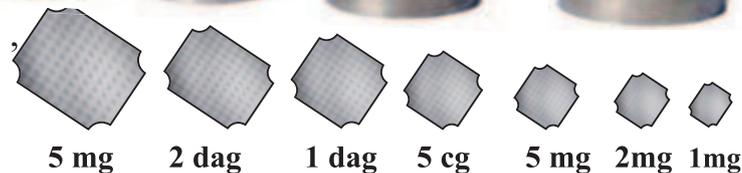
E mapipnasqe jekhimata maj tikne sar jekh kilogrāmo si o hektogrāmo, *o dekagrāmo, o grāmo, o decigrāmo, o centigrāmo, o miligrāmo.*



- Kaj te keren pen varesode mapimata anθar o tolāripen utilizisaren pen:
- notisarde etalònurā anθ-e grāmurā;



- notisarde sastrā (eksemplosθe, anθ-e drablinānqe laboratòrurā vaj vaš e sovnakutne kućimata)



Klasaqe butā!

I Alina akhardās k-e pesqo bijandipnasqo dēs pesqe amalen. Laqi daj kamel te kerel laqe jekh tōrto palal i avutni recēta:

| | | | | |
|-------|--------|------|-----------|--------|
| aro | zàharo | anre | margarìna | frìška |
| 350 g | 300 g | 8 | 100 g | 200 g |

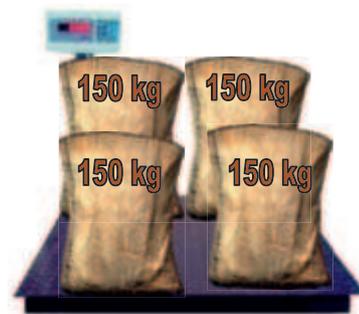
Dikh so kantitēta si la daja khere:

| | | | | |
|-------|--------|------|-----------|--------|
| aro | zàharo | anre | margarìna | frìška |
| 680 g | 500 g | 20 | 50 g | 120 g |

Keren e koboripnasqi komparācia thaj phenen kana aresen laqe vaj sode trebal te maj kinel anθar svāko prodūso!

9. E kilogramosqe multiplurā

- **Dikhen** e ćitre thaj ginaven o savorro pharipen e tolārde butānqo!



Inkeren godāθe! E multiplurā e kilogramosqe si *o kintālo, i tōna*.

| | | | |
|--------------------------------|-----------|---------|------|
| E mapipnasqe jekhimatenqo anav | kilogrāmo | kintālo | tōna |
| O xarno xramosaripen | kg | q | t |

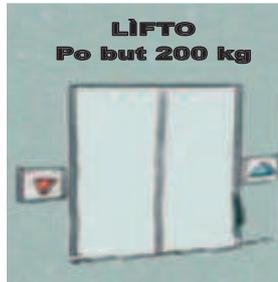
$$1 \text{ q} = 100 \text{ kg}$$

$$1 \text{ t} = 1\,000 \text{ kg}$$

Klasaqe bută!

1.

Anθ-o telutno tabèlo si e çhavenqo pharipen save aźukeren te unklōn anθ-o lifto



| Àna | Grigòre | Alina | Niku | Mamina |
|-------|---------|-------|-------|--------|
| 30 kg | 55 kg | 48 kg | 42 kg | 37 kg |

Arakhen:

- šaj unklōn e liftoça savorre çhave jekhvar?
- savorre šajutnimata anθ-e save šaj te xulaven pen e çhave kaj te unklōn anθ-o lifto, respektindoj i dini kondicia!

2. Jekh kamiòno pherdo barreça tolàrel 10 tōne. Arakhen sode tolàrel o barr, zanindoj ke nùmaj o kamiòno çúço tolàrel jekh firtàri anθar i savorri kantitèta!

3. Kaθar jekh materialurenqo depòzito sas kinde 8 gone cimènto po 40 kg svàko gono, 8 gone vàro po 30 kg svàko thaj 10 gone ipsos po 15 kg svàko. Zanindoj ke o paš-vurdon na šaj te ingerel maj but sar 350 kg jekhvar, arakhen sode minimo transpòrturà kerela vaš e materialurenqo phiravipen!

10. E mapipnasqe jekhimata vaš o vaxt maj tikne sar jekh dīves



Te palemidikhas!



O çàso si o labno/o instrumènto savo mapinel e vaxtesqo thavdipen.

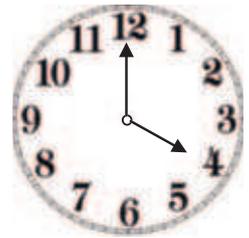
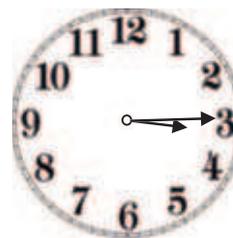
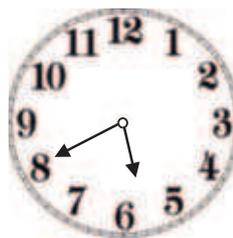
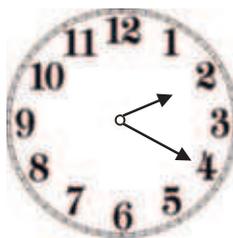
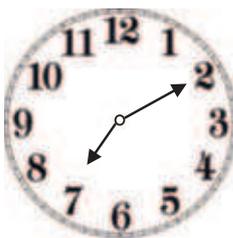
Inkeren godăthe! *1 òra = 60 minùtură* *1 dīves = 24 òre*

Anθ-jekh dēs, e oraqi suv trujarel dujvar e çasosqo kadràno.



Klasaqe bută!

1. Dikhen e càsură thaj phenen so òre sikavel sàrkon çàso (anglal o mezimeri thaj palal o mezimeri).



2. Ginaven sode inkerel svàko aktivitèta!

- E zivdisarde çitre vaš e çhave širden k-i òra 19 thaj 20 minùtură thaj agorisaren pen k-i òra 20 thaj 10 minùtură.
 - O koncèrto širdās k-i òra 20 thaj 30 minùtură thaj agorisardās pes k-i òra 22 thaj 25 de minùtură.
3. Anθ-jekh audioalbùmo si 8 gilă po 3 minuturenqe p-aver albùmo si 5 gilă po 5 minuturenqe. Sode vaxt inkeren e duj albùmură?



12. Monède thaj banknòte

Te palemdikhas!

E pramatànqi/ thaj e sevimateñqi valòra si ginavdi anθ-e **monetàro jekhimata**.

E cirkulaciaqe fòrme e monetarone jekhimatenqe si e **monède/ e marde love thaj e banknòte**.

Inkeren godãthe!

E monetàro jekhimata labårde si:

- Anθ-i Rumùnia: **o lèvo thaj o bàno** (1 lèvo = 100 bànurã)
- Anθ-e Evropaqi Ònia: **o èuro thaj o cènto** (1 euro = 100 cènturã)



Klasaqe butã!

1. Jekh bilèto k-i cinema si 12 lèvurã. Phenen so love xudena palpale sarkon çhavo, zanindoj ke von pokinde kadja:
 - O Mihài: jekh banknòta 50 levurenqi;
 - O Alin: 2 banknòte 10 levurenqe;
 - O Kosmin: jekh banknòta 10 levurenqi thaj jekh 5 levurenqi.
2. Sode kerel jekh ròkia, kana i Andrea pokindãs vaş laqe 2 banknòte 10 levurenqe, 4 banknòte 5 levurenqe thaj xudãs palpale 3 banknòte 1 levosqe?



Keren buti khethanes!

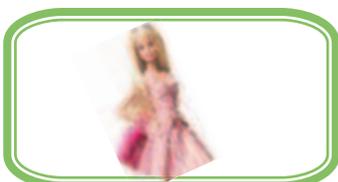
Dikhen khelnorrenqi timin! Zanindoj ke la Alina si la 265 lèvurã, la Sonia si la 184 lèvurã, le Ştefanos si les 98 lèvurã, haj la Vali 53 lèvurã, phenen so khelnorre şaj te kinen sarkon çhavo thaj sode love açhenas sarkone zenesqe?



→ 232 lèvurã



→ 49 lèvurã



→ 85 lèvurã



→ 146 lèvurã



13. Evaluàcia

1. Xramosaren e mapipnasqo jekhipeu trebutno kaj te mapinel pes:

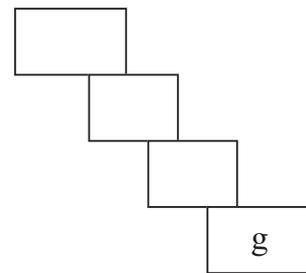
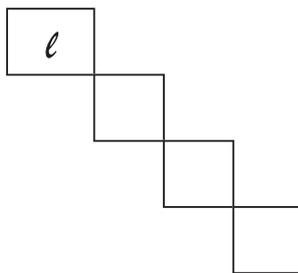
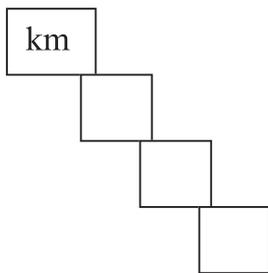
- a) o pani anθar jekh taxtaj;
- b) o durāripen Krajòva – Karàkal;
- c) o mas anθar jekh kutia.

2. Vaś svàko mapipnasqo labno/ instrumènto, alosaren thaj xramosaren so vov mapinel!



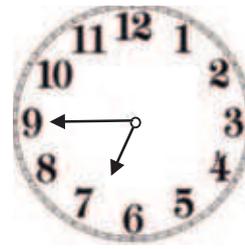
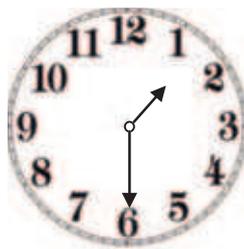
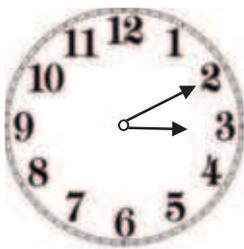
- a) o volùmo
- b) o vaxt
- c) o lunžípen
- a) i valòra
- b) o volùmo
- c) o pharipen
- a) o pharipen
- b) o lunžípen
- c) o volùmo

3. Čitren thaj pheren e kherorra e trebutne mapipnasqo jekhimatença!



4. Vaś svàko çàso, xramosaren savi òra sikavela:

- a) palal 4 òre;
- b) palal 1 òra thaj paš;
- c) palal 3 òre thaj jekh firtàri.



5. O Mihāj kidās maj but monède: 7 monède po 50 banurenqe, 10 monède po 5 banurenqe thaj 12 monède po 1 banosqe. I Alina, pesqi phen, kidās 5 banknòte, 3 jekhe levosqo thaj duj 5 levurenqe. Kas si maj but love thaj sodença?

| Kalifikativo \ Ítemo | Ítemo | | | | |
|----------------------|---------|---------|---------|---------|-----------------------|
| | 1 | 2 | 3 | 4 | 5 |
| Dòsta | a | a | a | a | jekhe çhavesqi sùma |
| Mišto | a, b | a, b | a, b | a, b | sarkone çhavesqi sùma |
| But mišto | a, b, c | a, b, c | a, b, c | a, b, c | pherdo rezolisaripen |

IX. AGORUTNO PALEMDIKHIPEN

1. E naturàlo gina kaθar 0 k-o 1 000 000

1. Xramosaren e naturàlo gina:

- a) kaθar o 96 zi k-o 103; b) kaθar o 392 zi k-o 403;
 c) kaθar o 1 203 zi k-o 1 188; d) kaθar o 6 896 zi k-o 6 907;
 e) kaθar o 8 005 zi k-o 7 993; f) kaθar o 9 989 zi k-o 9 995.

2. Xramosaren anθ-e štartorre thaj palal kodoja pheren o tabèlo!

| | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| o gin | 258 | | | 712 | | | 487 | | |
| anglogin | | 689 | | | 814 | | | 602 | |
| avutno gin | | | 911 | | | 271 | | | 106 |

3. Xramosaren trin konsekutivo gina:

- a) 5 cifrenqe; b) 4 cifrenqe; c) 3 cifrenqe; d) 6 cifrenqe.

4. Dikhen e gina xramosarde anθ-o jekhto tabèlo, citren anθ-e štartorre o dujto tabèlo palal kodoja xramosaren e gina anθar o jekhto tabèlo ka-o trebutno than anθar o dujto tabèlo!

| | | | | | |
|-------|---------|---------|---------|-------|-------|
| 6 827 | 95 | 1 054 | 87 | 98 | 330 |
| 1 330 | 876 810 | 385 594 | 100 000 | 1 492 | 1 517 |

| | Gina xramosarde po but anθar 3 cifre | Gina xramosarde po cira anθar 3 cifre |
|---------------|--------------------------------------|---------------------------------------|
| 3uteça gina | | |
| Bisuteça gina | | |

5. Vaš svàko gin, phenen e lolàrde cifrenqi klàsa thaj o òrdino:

- 9 763 13 904 508 401 973 114 164 572

6. Xramosaren savorre naturàlo gina kerde anθar 5 cifre save si len sajekh cifre! Komponisaren jekh kasavo ginavipen!

7. Utilizisarindoj jekhvar e gina 3; 7; 0; 4, xramosaren:

- a) o maj tikno naturàlo gin; b) o maj baro naturàlo gin.

8. Xramosaren anθ-e štartorre e gina, keren i komparàcia thaj xramosaren o trebutno sèmno (<; =; >).

a) 46 64

b) 423 409

c) 76 892 84 901

35 42

902 1 003

98 782 73 865

85 85

644 733

105 000 98 000

2. Ginavimata e naturalone ginença

1. Ginaven:

- a) e ginenqi sùma: 53 thaj 49; 432 thaj 567; 789 thaj 351; 1 258 thaj 8 967;
 b) e ginenqi diferènca: 78 thaj 56; 678 thaj 489; 790 thaj 567; 6 908 thaj 3 490;
 c) e ginenqo prodùso: 8 thaj 7; 9 thaj 6; 10 thaj 5; 2 thaj 16; 4 thaj 7; 5 thaj 80.
 d) e ginenqo kito: 64 thaj 8; 36 thaj 9; 96 thaj 4; 88 thaj 8; 99 thaj 9; 66 thaj 6.

2. Jekh tèrmeno si 38, haj kolaver si 14-eça maj tikno. Arakhen e duje termenurenqi sùma!

3. Ginaven sigutnes, thovindoj trebutnes e tèrmenurã:

- a) $3 + 46 + 4$ b) $324 + 111 + 256$ c) $41 + 34 + 11 + 22$
 $65 + 7 + 28$ $487 + 349 + 179$ $123 + 56 + 14 + 45$

4. Dujje ginenqi sùma si 567. Jekh anθar e gina si 389. Arakhen o kolaver gin!

5. Ginaven sigutnes, thovindoj trebutnes e fãktorurã:

- $2 \times 3 \times 5 = (2 \times 5) \times 3 =$ a) $2 \times 4 \times 5$ b) $7 \times 2 \times 5$
 $= 10 \times 3 =$ $2 \times 7 \times 5$ $8 \times 4 \times 2$
 $= 30$ $4 \times 4 \times 2$ $3 \times 3 \times 1 \times 10$

6. Jekh fãktoro si 9, haj o dujto si trinvar maj tikno. Arakhen lenqo prodùso!

7. Arakhen e biprinzarde gina:

- $458 + a = 880$ b) $789 - c = 345$ c) $6 \times n = 48$
 $b + 212 = 644$ $x - 480 = 160$ $z : 5 = 9$

8. Kidãren e gina xramosarde anθ-o štarigalo, gelindoj palal o sikavdo sènso. So dikhen?

→

| | | |
|----|----|----|
| 60 | 70 | 20 |
| 10 | 50 | 90 |
| 80 | 30 | 40 |

 → Kadava si jekh drabardo kherorro. E ginenqi sùma sikavdi e drunaθar/kaθar e sèmnurã si 150.

9. Pheren e ginença kerde nùmaj anθar deša, kaj aresel pes k-e štarigale save si len e xramosarde ginenqi sùma 100 vi p-i horizontàlo vi p-i vertikàlo!

| | | |
|----|----|----|
| 60 | | 10 |
| | | |
| | 30 | |

| | | |
|----|----|--|
| | 20 | |
| 30 | | |
| | 50 | |

| | | |
|----|----|----|
| | | |
| | 10 | |
| 30 | | 60 |

ANDER

| Krt. gin | Siklärinasqe kapitotură | Andera | Patrin |
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| Krt. gin | Siklăripnasqe kapitolură | Andera | Patrin |
|----------|---|--|--------|
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