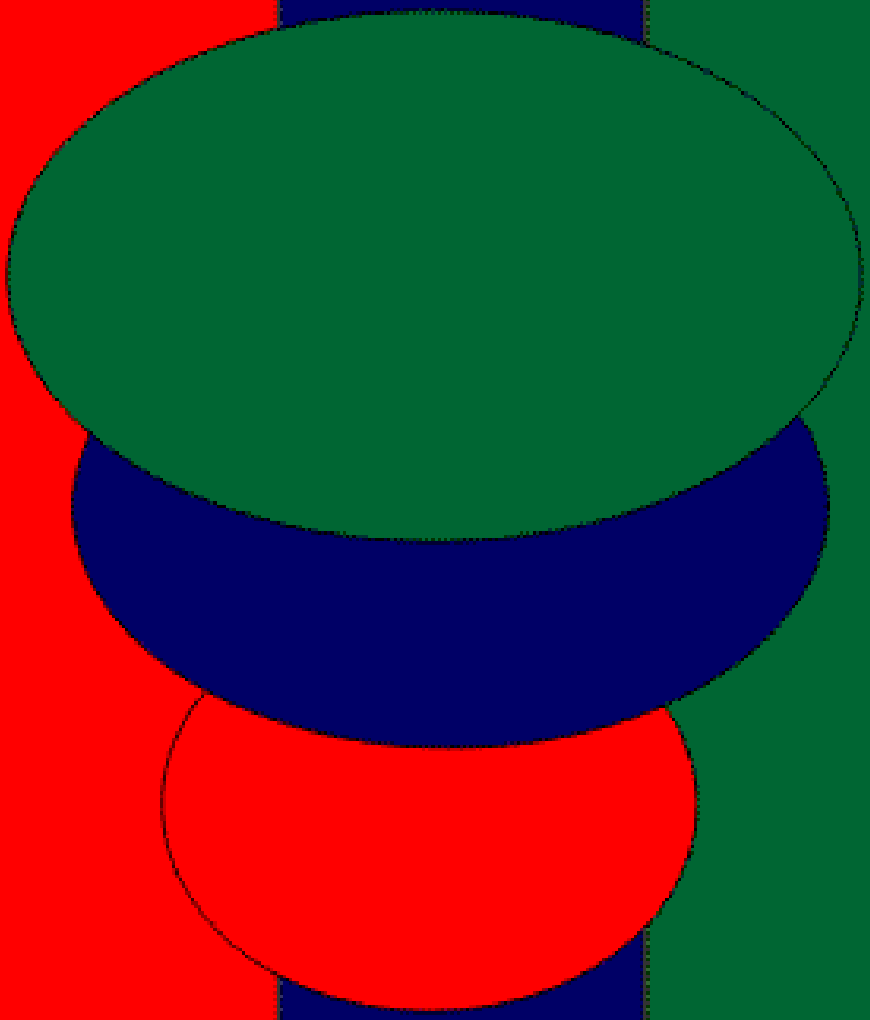
ENYABAGI

Nupe Mathematics



ADAMU IDRIS MANARAKIS NIW

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Boma kpata a gun yekan fi nin nya dakagi nana o. Ga ye egan nana zhi zheka wunma yi be tsukun gwasun eli egwadan nya kpikpeba Nupe nya ma. Ga dzodzo o kaufi sanwogi o ma, ga ku u fi putugi o ma, ga ya u zheka ma sayi woga de egwadan nya ekoya be Manarakis e.

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ETIKPE – PREFACE

Mini yemapakondorogi Enyabagi Nupe o, Enyaba ko Enyalo dan mini nyana zo gan na, tuko bana Nupencizhi e bici u na, nama wanfe Patampa enya na ezazhi a tagbogun eti kpinkpin u bo na. Dagan cyaba enyadondo, ezandondo yi egi mimaci ezhimi be dandan nya ezhimi wuncin, nama yi kpeye bya le mini yi ye fi tatacin ezhimi epadzuru zhi o na, wuncin ma gonyi u fe enya na a la yi kegan be dzodzo yi nyi na. Zumazheta ga yi gwako enya na e wu ezhimisun zhi kakanyi kin Nigeria o na o. Nama Nupe dan mini ezhimi nazhi ezazhi e duwan kede wun dan mini ezhimi na Hausa ko Nasara goti be nyi na, ke nya yitso lugwa. Lugwa mi la erin be: Egi mimaci Nupe eye-to-zuma ma enyaba be Nupe nya, sayi wun ga u lakeba be Nasara e ko kenci kanga ga enya a ye ba o. Egan nana a fe egan yekpa ya mi. Enyabagi ga yi eyekosun yizhe le yi nya o ebo wunga aga ji wo e ye vanyi o. A de kpangwa yizhe na ga ye dantsunwan wunma yi be enyaluloci nya na. Byacin, Enyabagi Nupe na yi a kpin na, wan zhe kpaka tati yi bo. Nupencizhi, eka kawanyi na yi de yi ci ga la enyana ya yi na zhin eko na, ga danna o, yi ga tagbogun eti egwalasun Nupe o, Soko a ye ma, nya zandoci zhi tsa yi a fe gbe za o, ke nyaba yitso lugwa o, kede wun a gbagba na wan keden ci u le etswa ye na.

Byacin, enya wangi ndondo na wo ga e tuye na, be na woga jinwo na e eti eyelo ezhimisun yi bo na, bandondo wunga gbota da kan na, gbanyadzu dan u kami yi maka e danbo na. Gbangban nya eza nana wunga yi; dada wan nya o dan, ebo nya yi ga yi nya yi nya o, nyaba ma yi nyaba a.

ENGLISH TRANSLATION

In the Philosophy of Nupe Mathematics, Counting (Enyaba or Enyalo) is one of the most difficult aspects that Nupe people shy away from learning due also to the situation our society is in which makes Nupe people and others lazy about seeing the strength of Numeracy in their Primary Languages.

In the first place, you are a child of a tribe and culture, now that you know your secondary language (English) and soil (Nigeria), is not a reason to neglect your origin. Negligence is what's killing many Languages in Nigeria. In the case of Nupe, we are in an awful fix because we are content with the influence of our society. Take for example: a bonafide Nupe Son can no longer count in Nupe unless he/she mixes it with English or Hausa before he is able to communicate, which is very appalling.

Mathematics is a fundamental eyeball of all aspects of life because of it's simple relevance. No section of life can be measured without calculation; as such the need to learn Nupe Mathematics is paramount.

Nupencizhi, this is the only time we have to restore our long time plans, if we are careless in handling it, God forbid, we may continue to borrow from those who are faraway and will never consider your Nupe as important enough to see the moon.

So whatever good you are expected and can do to help this plan no matter your level, please it is never late. Do it now and let ours be ours and theirs be theirs. Thanks!

Adamu Idris Manarakis niw
Yemapakondoro Enyabagi Nupe
(Tashiru Nupe _ Dagba Nda yi o)

DZUNDZUN – INTRODUCTION

Mini ezaba nya etun kpata na Nupencizhi e lo na o, kpataki eza makamagi bagi ko nyizagi na dan eban ninbo ko eban zuma o na, wo a leye gangan aga jin ah tagbogun be enyaba e na ga a gbintu shitsun na, beto eda kpautsun zhi. Nana ma wugwa gan yekpa Nupencizhi gona-go kagan ah de kpikpe eti dangugizhi bwa na, kpataki nya Nasara ko Arabi. Yetso wo gan enunuci na ga e wa lo dana lilici na, ko wun e wagan wun shi pupugi na, aga u jin egun ebo enya na wun ma ba na. Gbani, yi degwa na yiga wa eyelo ya eza yi zhi na.

Dakagi nana yi eti eyelo waya kinmi yi bo o, nama Kpikpewaba Patampa nazhi fi Kin Nupe o na, a fe wu enyaba na.

Mi e wa be Nupenci ndondo e kede wun la nini u shi na, wun ma u kpin emilatu zhi nya Dangugi Nupe nana.

Dakagi nana gangan zhi etigan caba nya Enyaba o; Enya lakeba, Enya like, Enya gan, be Eda e.

Beacin, dakagi nana de edushi eti kendo Nupencizhi fe ba enya warawara panyi le na a. A tswa enya woro danguruko zhi fi mini dakagi nana o, nama a be de etun wangi zhi yegboro, fondoci na.

TRANSLATION

In interacting with Nupes of all works of life especially the ordinary man or woman in rural nupe land you will find they can hardly count beyond 100 and multiples of 1000 in Nupe.Thus this limits their potential to think as Millionaires or Billionaires if they have no knowledge of other numeracy system especially the western or Arabic. You have all heard anecdotes on how farmers going for Hajj or trying to buy a motorcycle have been cheated due to their inability to count. We now have an opportunity to empower our people.

This book is an empowerment tool and should be available at all primary schools in Nupe speaking states.

I urge every Nupe person to pick up a copy and understand the basic rules of Nupe numeracy.

The book focuses on basic counting, addition, subtraction, multiplication and division.

The book however does not delve into the ancient numerical system of the Nupe's. This art form though almost extinct is talk for another Day.

Dr (Mrs) Aishetu Ndayako-Mohammed.

EGANKO – COMMENT

Nini mini mimancinle nazhi kin babo gonyi u gunkun eti u bo na, wun yi lilanyi na ezhimisun nya kin-denzhi la ezhimi nya kin babo ndoci zhi danmi eti rurukpe o na.

Kendo na yi e dinnyi dan ezhimisun kin-den zhi ke nya yitso lugwa na, wunga la ezhimisun yi zhi ci de yegborolo kendo gonyi na nyi o.

Beacin, eyelo na Adamu Idris Manarakis e wa ya ezhimisun Nupe na, wun ge Gawama jin ya. Enya nazhi wun e jin gbani ebo eyelo kinnupe o na, wunga kuci yi zhi layedan kendo gonyi na a nyi o, nama kagan yi kukuta, wan la zumazhin be ya yi na. Eza nyiri nana zhi gonyi a de egwaso. Eyelo wa ya ezhimi yi zhi, wun yi etun zandondo.

Bokunshicizhi be eza nazhi de ewo fi Kinnupe o na, wun gonyi ala egwafin gbannyi dan nyadzugba nana o eti ewuce o ebo wun la u fe egun-lashishi ya egi nazhi la be yizhe a na.

TRANSLATION

One of the problems Nigeria would have to fight squarely, and which she has not handled with seriousness, as a developing nation is language imperialism. Over emphasis in the undetstanding of foreign languages while neglecting our Local languages is a ban to national development. Therefore, Adamu Idris Manarakis' relentless effort in seeing to the growth of Nupe Language deserves commendation. His type of passion for the preservation of his mother tongue is what our societies have lacked for a long time, which has contributed to our backwardness to some extent. These kinds of people are not supposed to be left to their own efforts. Indigenous language promotion should be everyone's responsibility. Authorities and well to do individuals in Nupe Kingdom ought to key into this project and ensure it is left as a solid legacy for unborn generations.

Abubakar Akote.
(A Minna based Freelance Journalist)

EDZUTACI - EDITOR

Etun boyefa ga Manarakis e lo dan na o. Wun ma e mafi mi be eyelo nazhi wun e de na e. Enya na wo e jin da na, enya ya o na kinnupe gonyi wun gbanyadzu be zumatu i ebo yegborolo ezhimisun yi bo na.
Ejinda gawama na dokun na yegi mi. Mi e kpa wo e be eyelo na gonyi na yegboro.

TRANSILATION

This is an inspirational piece you have here, Manarakis. I am very proud of your achievement so far. This is something the whole Nupe Kingdom ought to be proud of and support with all possible to see that Nupe Language and those who speak it attain a new height.
Congratulations once again brother. I wish you more deserving achievements in the nearest future.

Muhammad Ndaman Jibrin Goro Mokwa
(Man na wu mi Enyabagi nasara na - My Maths Tutorial Master)

Manarakis yi gwazuma mi, a ma u Minna o anma wan zhe enya mamaki ya zandondo bana wunda kpin Nupe na, a ma e wu kpikpewaba yi zhi bwa na.
Nya zana yi nuguciko a na, enya na mi gbanyadzu eti u bo ci e jin na, wunga yi mi tu zuma kendo gonyi na o.
Enyabagi Nupe nana yi bodongi kin Nupe o, nama ala de eza na jin nyiri u le a na, Yi ma e tu enya na gan nana na ye be u nyi yegboro, tona de yi wogan Federal polytechnic Bida ga ca Nupe wu toshi na eti "Ordinary Diploma nya Nupe Languaage o."
Ejinda na dokun na ya yegi mi.

TRANSLATION

Manarakis is my younger brother, he was born in Minna but it's our surprise in the family on how he came about Nupe Language experience and it's not thought any where, not even our Schools.
As an eldest brother in the family, what I give him always is encouragement because I know he can do better than little I score him.
This Nupe Mathematics (Enyabagi) is a virgin in the history of Nupe Land and it's our hope in the nearest future he will come up with another golden shape, even though we are aware that he recently attains his dream in sending Nupe Language to Federal Polytechnic Bida which will starts next semester as "Ordinary Diploma in Nupe Language."
Once again, Congratulations my brother.

Musa Alhaji Ibrahim
(Mukaddami Samarin Nupe)

EMIDAN – FORWARD

Eza kyangi mini gwako enyakaci zhi o ga ka ***ENYABAGI*** Nupe o, ahbe ***ALJAMI*** Nupe mini yizhele eya kpautwani o. Zanazhi tsoba Nupe na, kpikpe nya gwalagi Nupe wunga jin wan ezandoci zhi gizhi. Etan lawu gan Binyeci zhi wa kpikpe be yematsun i na yitso e yi gan Loloki yina na, wunci ya Enyakaci zhi egwade etigan enya woro zhi tswafin enya nazhi dan KinNupe o panyi le a na. Kila Enyakaci Nupencizhi ci ga kuta be enya woro tswafin ezhimisun Nupe nyi o? Wun yi ebona ***"Enyapadzuci European"*** zhi beto ezazhi nya gwata Yekpe-Soko e (man zhi), gwako a degwa na a wa yekpe-nupe loye na. Beacin, wunjin ebo gbogunto be yegborolo Nupe nyi a.

A de gwata kpikpe wa na lagwa-to Enyabagi a na; ko wo gangan ***"Geography, Physics, Chemistry, Biology, History-Etan, Languages-Ezhimizhi, atato Loloki-Technology.*** Yinanna, Enyabagi a fe gwapa ya gwalagi zhi kpata nazhi fi emi yizhe babo na, ke; ***Arabi*** na, ***French***, ***English***, ***Ibrew***, ***Spanish***, be nakena zhi.

Enyakaci nana ge gawama jin ya be dudugi-tsakagi nana e ebo eyelo ezhimisun Nupe o. Nama wun tswa Dangugi woro zhi na yizhe kpata na ga e wagan wan kpin Enyabagi Nupe be egwatso e na, wan kpin u kpin be eshinda e na. Yizhe kpata, ezhimisun ndondo tswa enya woro zhi wo, kpataki ke ***"Eganzhi-words na be Dangugizhi-numerals*** nazhi ma a zhe egiyeko tsukungwasun nya Eganshidugi na, gwata kpikpe o.

Yizhe gbani o, zandondo e lotun lo be Loloki, nama wuntso Loloki be etitacin u nyi yi enyatswa na. Enyana Enyakaci nana e dinko ya na, wunga yi lila keto ezhimisun Nupe o ebo wun makpa be ezhimi kin ***Africa*** zhi nazhi de elatu be etoke na. Kpataki; ***Hausa, Yoruba, Igbo, Swalihi*** ahbe gwako ezhimisun danguruko nazhi dan gwata ***"Khaush o"*** kin ***Africa*** o na.

"A ga e lo, wo ce lo be a nyi ma."

TRANSLATION

*Little has been written about Nupe Mathematics "ENYABAGI" and especially little about Nupe **ALJAMI** (Nupe Transliteration) in the late Eighteenth Century of the Common Era. The concept of the knowledge of the Language of Nupe is misunderstood by the observers outside the people of the Language.*

The Nupe scholarship in history have acquired the ideal knowledge and skills that formed what is known as Technology today but abscured by the advent of modernity in the societies. This is because the European Colonialists and Religious reformer generally had no taste for the delicately Nupe nuanced acquired knowledge and skills. And certainly not for the intangible progress of the Nupe tribe.

No subject of education that does not touch aspect of Mathematics, be it Geography, physics, Chemistry, Biology, History, and Languages, embedded in Technology. Mathematics as the stem of all subjects of scholarship has much emphacy in all outstanding official languages in the world today; Arabic, French, English, Ibrew, Spanish and etc.

The Author has done a wonderful work in his research of "Nupe Development" to come up with Nupe Numerals which in any official scholarships of the Languages of the world today, is allowed to innovate "Words and Numerals" that are the keys of educational literature today. Modern world is operating on Technology which itself is based on innovations. The efforts put together by the Author is an attempt aiming at bringing out some aspects of the acquired knowledge of the Nupes to enhance its modern development so that it moves along with its contemporary Byzantine tribes of Africa that are scholarly known today: Hausa, Yoruba, Swahili etc of the defunct Khaush Empire of Africa.

"A ga e lo, wo ce lo be a nyi ma."

Alh. Dauda Ibrahim Bida
(Dan Etan Nupe - Nupe Language Historian)

ENYA NAZHI FI NINBO NA – TABLE OF CONTENT

Enyabagi – Mathematics	i
Gangba – Warning	ii
Etikpe – Preface	iii
Dzundzun – Introduction	iv
Eganko – Comment	v
Edzutaci – Editor	vi
Emidan – Forward	vii
Enya nazhi fi ninbo na – Table of content	viii
Karanyi e kan eyelo a – Slowness doesn't stops going	ix
Enyaba egwa nini lo shita – Counting from 1 to 60	x
Enyaba egwa shita be nini e lo shitswanyi – Counting from 61 to 120	xi
Enyaba egwa shitswanyi be nini e lo Gwasan – Counting from 121 to 180	xii
Enyaba egwa gwasan be nini e lo kpako be shiba e – Counting from 181 to 240	xiii
Enyaba egwa kpako be shiba e tu nini lo kpako be shitsun e – Counting from 241 to 300	xiv
Ba enya guwo be gwegi e – Count in 10's and 15's	xv
Ba enya arata be shitsun e – Count in 50's and 100's	xvi
Ba enya kpautsun be gbaguwo e – Count in 1000's and 20,000's	xvii
Etun nya BA, TA, NI, TSUN, NYI, TWABA – Founction of 2,3,4,5,6,7,	xviii
Ba enya kpautsuntsun be gbagbadi e – Count in 1000000's and 1000,000,000's	xix
Enyaba zhimi kakanyi zhi – Count in different languages	xix
Zasan zhimi kakanyi zhi – Picture of different languages	xx
Egwatugi Eda – Multiplication table	IӨ
Enyaba nupe tashiru – Pure nupe counting formation	IӨ
Ba enya eda eda zhi – Count in multiples	I I – Iц
She efo zhi – Fill in the gaps	I I – Iц
Takizhi – Symbols	IШ
Ebagizhi – Squares	IƐ
Enya lakeba – Addition	IП – Iʁ
Enya lakeba be kike e – Addition with remaining	Iρ – цӨ
Zhelo egan zhi – Change to words	цI – цц
Zhelo egi zhi – Change to numbers	цШ – цƐ
Gbagba gan, wunda, nciko gan – Less than, equal to, greater than	цП – ШӨ
Edo be kpetso e – Pecentage and Fraction	ШI – ШП
Enya like – Subtraction	ШӘ – Шʁ
Egimikazhi be egizhi tswa e – Letters and numbers formation	Шρ – ЄЄ
Ezo egan nya enya lakeba – Word problem on addition	ЄП – Єʁ
Ezo egan nya enya like – Word problem on subtraction	Єρ – ПI
Egwatugi eda – Multiplication table	Пц – ПЄ
Eda – Multiplication	ПП – ӘӨ

Ezo egan nya eda – Word problem on multiplication	ƏI – Əц
Ema yekpazhi – Quantitative reasoning	ƏШ – ГӨ
Efin – Time	Г І – Гц
Efozhi – Days	ГШ – Гɛ
Ewo – Money	Г П – ГГ
Enyagan – Division	Гʁ – ʁШ
Ezo enyagan – Word problem on division	ʁɛ – ʁП
Gbagbangi, Bedozhi, Eda – Lowest, common, multiple [GBE – LCM]	ʁƏ – ρІ
Bedozhi bwadwa e – Common factor	ρц – ρШ
Etizogi, Bedozhi, Bwadwa – Highest common factor [EBB – HCF]	ρɛ – ρП
Ekpetso – Fraction	ρƏ
Pedzozhi – Shapes	ρГ
Ema efin – Time measurement	ρʁ
Etazhi – Lines	ρʁ
Kami nupe – Nupe calendar	ρρ
Yemakpe – Logic	ρρ
Etswa zhi – Months	ІӨӨ
Ganmi manarakis – Manarakis law	ІӨІ

KARANYI E KAN EYELO A

Slowness doesn’t stops going

Enyaba egwa nini lo Shitá

[Counting from 1 to 60]

1	Nini	31	Gbanwo be nini i
2	Guba	32	Gbanwo be guba e
3	Guta	33	Rudin din guba
4	Gunni	34	Rudin din nini
5	Gutsun	35	Rudin
6	Gutswanyi	36	Rudin be nini
7	Gutwaba	37	Rudin be guba e
8	Gutota	38	Shiba din guba
9	Gutwani	39	Shiba din nini
10	Guwo	40	Shiba
11	Guwo be nini	41	Shiba be nini
12	Guwo be guba e	42	Shiba be guba e
13	Gwegi din guba	43	Shiba be guta e
14	Gwegi din nini	44	Shiba be gunni
15	Gwegi	45	Shiba be gutsun i
16	Gwegi be nini i	46	Shiba be gutswanyi
17	Gwegi be guba e	47	Shiba be gutwaba e
18	Eshi din guba	48	Arata din guba
19	Eshi din nini	49	Arata din nini
20	Eshi	50	Arata
21	Eshi be nini	51	Arata be nini
22	Eshi be guba e	52	Arata be guba e
23	Eshi be guta e	53	Arata be guta e
24	Eshi be gunni	54	Arata be gunni
25	Eshi be gutsun i	55	Arata be gutsun i
26	Eshi be gutswanyi	56	Arata be gutswanyi
27	Eshi be gutwaba e	57	Arata be gutwaba e
28	Gbanwo din guba	58	Shita din guba
29	Gbanwo din nini	59	Shita din nini
30	Gbanwo	60	Shita

Enyaba egwa Shita be nini lo Shitswanyi

[Counting from 61 to 120]

61	Shita be nini	91	Lwaswa be nini
62	Shita be guba e	92	Lwaswa be guba e
63	Shita be guta e	93	Lwaswa be guta e
64	Shita be gunni	94	Lwaswa be gunni
65	Shita be gutsun i	95	Lwaswa be gutsun i
66	Shita be gutswanyi	96	Lwaswa be gutswanyi
67	Shita be gutwaba e	97	Lwaswa be gutwaba e
68	Adwani din guba	98	Shitsun din guba
69	Adwani din nini	99	Shitsun din nini
70	Adwani	100	Shitsun
71	Adwani be nini	101	Shitsun be nini
72	Adwani be guba e	102	Shitsun be guba e
73	Adwani be guta e	103	Shitsun be guta e
74	Adwani be gunni	104	Shitsun be gunni
75	Adwani be gutsun i	105	Shitsun be gutsun i
76	Adwani be gutswanyi	106	Shitsun be gutswanyi
77	Adwani be gutwaba e	107	Shitsun be gutwaba e
78	Shini din guba	108	Shitsun be gutota e
79	Shini din nini	109	Shitsun be gutwani
80	Shini	110	Shitsun be guwo e
81	Shini be nini	111	Shitsun be guwo e tu nini
82	Shini be guba e	112	Shitsun be guwo e tu guba
83	Shini be guta e	113	Shitsun be gwegi din guba e
84	Shini be gunni	114	Shitsun be gwegi din nini
85	Shini be gutsun i	115	Shitsun be gwegi
86	Shini be gutswanyi	116	Shitsun be gwegi be nini
87	Shini be gutwaba e	117	Shitsun be gwegi be guba e
88	Lwaswa din guba	118	Shitswanyi din guba
89	Lwaswa din nini	119	Shitswanyi din nini
90	Lwaswa	120	Shitswanyi

Enyaba egwa Shitswanyi be nini lo Gwasan

[Counting from 121 to 180]

121	Shitswanyi be nini	151	Shitwaba be guwo e tu nini
122	Shitswanyi be guba e	152	Shitwaba be guwo e tu guba
123	Shitswanyi be guta e	153	Shitwaba be gwegi din guba
124	Shitswanyi be gunni	154	Shitwaba be gwegi din nini
125	Shitswanyi be gutsun i	155	Shitwaba be gwegi
126	Shitswanyi be gutswanyi	156	Shitwaba be gwegi tu nini
127	Shitswanyi be gutwaba e	157	Shitwaba be gwegi tu guba e
128	Shitswanyi be gutota e	158	Shitota din guba
129	Shitswanyi be gutwani	159	Shitota din nini
130	Shitswanyi be guwo e	160	Shitota
131	Shitswanyi be guwo e tu nini	161	Shitota be nini
132	Shitswanyi be guwo e tu guba	162	Shitota be guba e
133	Shitswanyi be gwegi din guba	163	Shitota be guta e
134	Shitswanyi be gwegi din nini	164	Shitota be gunni
135	Shitswanyi be gwegi	165	Shitota be gutsun i
136	Shitswanyi be gwegi be nini	166	Shitota be gutswanyi
137	Shitswanyi be gwegi be guba e	167	Shitota be gutwaba e
138	Shitwaba din guba	168	Shitota be gutota e
139	Shitwaba din nini	169	Shitota be gutwani
140	Shitwaba	170	Shitota be guwo e
141	Shitwaba be nini	171	Shitota be guwo e tu nini
142	Shitwaba be guba e	172	Shitota be guwo e tu guba
143	Shitwaba be guta e	173	Shitota be gwegi din guba
144	Shitwaba be gunni	174	Shitota be gwegi din nini
145	Shitwaba be gutsun i	175	Shitota be gwegi
146	Shitwaba be gutswanyi	176	Shitota be gwegi be nini
147	Shitwaba be gutwaba e	177	Shitota be gwegi be guba e
148	Shitwaba be gutota e	178	Gwasan din guba
149	Shitwaba be gutwani	179	Gwasan din nini
150	Shitwaba be guwo e	180	Gwasan

Enyaba egwa Gwasan be nini lo Kpako be shiba e

[Counting from 181 to 240]

181	Gwasan be nini	211	Kpako be guwo e tu nini
182	Gwasan be guba e	212	Kpako be guwo e tu guba
183	Gwasan be guta e	213	Kpako be gwegi din guba
184	Gwasan be gunni	214	Kpako be gwegi din nini
185	Gwasan be gutsun i	215	Kpako be gwegi
186	Gwasan be gutswanyi	216	Kpako be gwegi tu nini
187	Gwasan be gutwaba e	217	Kpako be gwegi tu guba
188	Gwasan be gutota e	218	Kpako be eshi din guba
189	Gwasan be gutwani	219	Kpako be eshi din nini
190	Gwasan be guwo e	220	Kpako be eshi
191	Gwasan be guwo e tu nini	221	Kpako be eshi tu nini
192	Gwasan be guwo e tu guba	222	Kpako be eshi tu guba
193	Gwasan be gwegi din guba e	223	Kpako be eshi tu guta
194	Gwasan be gwegi din nini	224	Kpako be eshi tu gunni
195	Gwasan be gwegi	225	Kpako be eshi tu gutsun
196	Gwasan be gwegi tu nini	226	Kpako be eshi tu gutswanyi
197	Gwasan be gwegi tu guba	227	Kpako be eshi tu gutwaba
198	Kpako din guba	228	Kpako be gbanwo e din guba
199	Kpako din nini	229	Kpako be gbanwo e din nini
200	Kpako	230	Kpako be gbanwo e
201	Kpako be nini	231	Kpako be gbanwo e tu nini
202	Kpako be guba e	232	Kpako be gbanwo e tu guba
203	Kpako be guta e	233	Kpako be rudin din guba
204	Kpako be gunni	234	Kpako be rudin din nini
205	Kpako be gutsun i	235	Kpako be rudin
206	Kpako be gutswanyi	236	Kpako be rudin tu nini
207	Kpako be gutwaba e	237	Kpako be rudin tu guba
208	Kpako be gutota e	238	Kpako be shiba e din guba
209	Kpako be gutwani	239	Kpako be shiba e din nini
210	Kpako be guwo e	240	Kpako be shiba e

Enyaba egwa Kpako be shiba e lo Kpako be shitsun i

[Counting of numbers from240 to 300]

241	Kpako be shiba e tu nini	271	Kpako be adwani e tu nini
242	Kpako be shiba e tu guba	272	Kpako be adwani tu guba
243	Kpako be shiba e tu guta	273	Kpako be adwani tu guta
244	Kpako be shiba e tu gunni	274	Kpako be adwani tu gunni
245	Kpako be shiba e tu gutsun	275	Kpako be adwani tu gutsun
246	Kpako be shiba e tu gutswanyi	276	Kpako be adwani tu gutswanyi
247	Kpako be shiba e tu gutwaba	277	Kpako be adwani tu gutwaba
248	Kpako be arata e din guba	278	Kpako be shini din guba
249	Kpako be arata e din nini	279	Kpako be shini din nini
250	Kpako be arata e	280	Kpako be shini
251	Kpako be arata e tu nini	281	Kpako be shini tu nini
252	Kpako be arata e tu guba	282	Kpako be shini tu guba
253	Kpako be arata e tu guta	283	Kpako be shini tu guta
254	Kpako be arata e tu gunni	284	Kpako be shini tu gunni
255	Kpako be arata e tu gutsun	285	Kpako be shini tu gutsun
256	Kpako be arata e tu gutswanyi	286	Kpako be shini tu gutswanyi
257	Kpako be arata e tu gutwaba	287	Kpako be shini tu gutwaba
258	Kpako be shita e din guba	288	Kpako be lwaswa e din nini
259	Kpako be shita e din nini	289	Kpako be lwaswa e din guba
260	Kpako be shita e	290	Kpako be lwaswa e
261	Kpako be shita e tu nini	291	Kpako be lwaswa e tu nini
262	Kpako be shita e tu guba	292	Kpako be lwaswa e tu guba
263	Kpako be shita e tu guta	293	Kpako be lwaswa e tu guta
264	Kpako be shita e tu gunni	294	Kpako be lwaswa e tu gunni
265	Kpako be shita e tu gutsun	295	Kpako be lwaswa e tu gutsun
266	Kpako be shita e tu gutswanyi	296	Kpako be lwaswa e tu gutswanyi
267	Kpako be shita e tu gutwaba	297	Kpako be lwaswa e tu gutwaba
268	Kpako be adwani e din guba	298	Kpako be shitsun e din guba
269	Kpako be adwani e din nini	299	Kpako be shitsun e din nini
270	Kpako be adwani	300	Kpako be shitsun e

Ba enya Guwo be Gwegi [Count in 10's and 15's]

10	Guwo	15	Gwegi
20	Eshi	30	Gbanwo
30	Gbanwo	45	Shiba be gutsun i
40	Shiba	60	Shita
50	Arata	75	Adwani be gutsun i
60	Shita	90	Lwaswa
70	Adwani	105	Shitsun be gutsun i
80	Shini	120	Shitswani
90	Lwaswa	135	Shitswanyi be gwegi
100	Shitsun	150	Shitwaba be guwo e
110	Shitsun be guwo e	165	Shitota be gutsun i
120	Shitswanyi	180	Gwasan
130	Shitswanyi be guwo e	195	Gwasan be gwegi
140	Shitwaba	210	Kpako be guwo e
150	Shitwaba be guwo e	225	Kpako be eshi tu gutsun
160	Shitota	240	Kpako be shiba e
170	Shitota be guwo e	255	Kpako be arata e tu gutsun
180	Gwasan	270	Kpako be adwani
190	Gwasan be guwo e	285	Kpako be shini tu gutsun
200	Kpako	300	Kpako be shitsun i
210	Kpako be guwo e	315	Kpako be shitsun i tu gwegi
220	Kpako be eshi e	330	Kpako be shitswanyi tu guwo
230	Kpako be gbanwo e	345	Kpako be shitwaba e tu gutsun
240	Kpako be shiba e	360	Kpako be shitota e
250	Kpako be arata e	375	Kpako be shitota e tu gwegi
260	Kpako be shita e	390	Kpako be gwasan e tu guwo
270	Kpako be adwani	405	Kpauba tu gutsun
280	Kpako be shini	420	Kpauba tu eshi
290	Kpako be lwaswa e	435	Kpauba tu rudin
300	Kpako be shitsun i	450	Kpauba be arata e

Ba enya Arata be Shitsun i [Count in 50's and 100's]

50	Arata	100	Shitsun
100	Shitsu	200	Kpako
150	Shitwaba be guwo e	300	Kpako be shitsun i
200	Kpako	400	Kpauba
250	Kpako be arata e	500	Kpauba be shitsun i
300	Kpako be shitsun e	600	Kpauta
350	Kpako be shitwaba e tu guwo	700	Kpauta be shitsun i
400	Kpauba	800	Kpauni
450	Kpauba be arata e	900	Kpauni be shitsun i
500	Kpauba be shitsun e	1000	Kpautsun
550	Kpauba be shitwaba e tu guwo	1100	Kpautsun be shitsun i
600	Kpauta	1200	Kpautswanyi
650	Kpauta be arata e	1300	Kpautswanyi be shitsun
700	Kpauta be shitsun i	1400	Kpautwaba
750	Kpauta be shitwaba e tu guwo	1500	Kpautwaba be shitsun i
800	Kpauni	1600	Kpautswanyi
850	Kpauni be arata e	1700	Kpautswanyi be shitsun i
900	Kpauni be shitsun i	1800	Kpautota
950	Kpauni be shitwaba e tu guwo	1900	Kpautota be shitsun i
1000	Kpautsun	2000	Gba
1050	Kpautsun be arata e	2100	Gba be shitsun i
1100	Kpautsun be shitsun i	2200	Gba be kpako e
1150	Kpautsun be shitwaba e tu guwo	2300	Gba be kpako e tu shitsun
1200	Kpautswanyi	2400	Gba be kpauba e
1250	Kpautswanyi be arata e	2500	Gba be kpauba e tu shitsun
1300	Kpautswanyi be shitsun i	2600	Gba be kpauta e
1350	Kpautswanyi be shitwaba e tu guwo	2700	Gba be kpauta e tu shitsun
1400	Kpautwaba	2800	Gba be kpauni
1450	Kpautwaba be arata e	2900	Gba be kpauni tu shitsun
1500	Kpautwaba be shitsun i	3000	Gba be kpautsun i

Ba enya Kpautsun be Gbaguwo e

[Count in 1000's and 20,000's]

1000	Kpautsun	20,000	Gbaguwo (Gba eda guwo)
2000	Gba	40,000	Gba shi
3000	Gba be kpautsun i	60,000	Gba gbanwo
4000	Gbauba	80,000	Gba shiba
5000	Gbauba be kpautsun i	100,000	Gba rata
6000	Gbauta	120,000	Gba shita
7000	Gbauta be kpautsun i	140,000	Gba dwani
8000	Gbauni	160,000	Gba shini
9000	Gbauni be kpautsun i	180,000	Gba lwaswa
10000	Gbautsun	200,000	Gba shitsun
11000	Gbautsun be kpautsun i	220,000	Gba shitsun be guwo e
12000	Gbautswanyi	240,000	Gba shitswanyi
13000	Gbautswanyi be kpautsun i	260,000	Gba shitswanyi be guwo e
14000	Gbautwaba	280,000	Gba shitwaba
15000	Gbautwaba be kpautsun i	300,000	Gba shitwaba be guwo e
16000	Gbautota	320,000	Gba shitota
17000	Gbautota be kpautsun i	340,000	Gba shitota be guwo e
18000	Gbautwani	360,000	Gba shitwani
19000	Gbautwani be kpautsun i	380,000	Gba shitwani be guwo e
20000	Gbaguwo	400,000	Gba kpako
21000	Gbaguwo be kpautsun i	420,000	Gba kpako be guwo e
22000	Gbaguwo be nini	440,000	Gba kpako be eshi
23000	Gbaguwo be nini tu kpautsun	460,000	Gba kpako be gbanwo e
24000	Gbaguwo be guba e	480,000	Gba kpako be shiba e
25000	Gbaguwo be guba e tu kpautsun	500,000	Gba kpako be arata e
26000	Gbagwegi din guba	520,000	Gba kpako be shita e
27000	Gbagwegi din guba be kpautsun i	540,000	Gba kpako be adwani
28000	Gbagwegi din nini	560,000	Gba kpako be shini
29000	Gbagwegi din nini be kpautsun i	580,000	Gba kpako be lwaswa e
30000	Gbagwegi	600,000	Gba kpako be shitsun i

Etun nya BA, TA, NI, TSUN, NYI, Twaba

[Founctions of 2, 3, 4, 5, 6, 7]

Eshi zhi 20's

Eshi + Eshi = Eshi-guBa = Shi**Ba** [20+20 = 40]

Eshi + Eshi + Eshi = Eshi-guTa = Shi**Ta** [20+20+20 = 60]

Eshi + Eshi + Eshi + Eshi = Eshi-guNi = Shi**Ni** [20+20+20+20 = 80]

Eshi + Eshi + Eshi + Eshi + Eshi = Eshi-gu**Tsun** = Shi**Tsun** [20+20+20+20+20 = 100]

Eshi + Eshi + Eshi + Eshi + Eshi + Eshi = Eshi-gutswa**Nyi** [20+20+20+20+20+20 = 120]

Eshi + Eshi + Eshi + Eshi + Eshi + Eshi + Eshi =Eshi-guTwaba= Shi**Twaba** [20+20+20+20+20+20+20 = 140]

Kpako zhi 200's

Kpako + Kpako = Kpa-guBa = Kpau**Ba** [200+200 = 400]

Kpako + Kpako + Kpako = Kpau-guTa = Kpau**Ta** [200+200+200 = 600]

Kpako + Kpako + Kpako + Kpako = Kpau-gunNi = Kpau**Ni**
[200+200+200+200 = 800]

Kpako + Kpako + Kpako + Kpako + Kpako =Kpau-gu**Tsun** = Kpau**Tsun**
[200+200+200+200+200 = 1000]

Kpako + Kpako + Kpako + Kpako + Kpako + Kpako =Kpau-gu**Tswanyi** = Kpautswa**Nyi** [200+200+200+200+200+200 = 1200]

Kpako + Kpako + Kpako + Kpako + Kpako + Kpako + Kpako =Kpau-gu**Twaba** = Kpau**Twaba** [200+200+200+200+200+200+200 = 1200]

Ba enya Kpautsuntsun be Gbagbadi

[Count in 1000,000's and 1000,000,0000's]

1,000,000 1 Million	**Kpautsuntsun (1000×1000)**	**1,000,000,000 1 Billion**	**Kpautsuntsun eda kpautsun (1000,000×1000) = Gbagbadi**
2,000,000	Kpautsuntsun eda guba	2,000,000,000	Gbagbadi guba
3,000,000	Kpautsuntsun eda guta	3,000,000,000	Gbagbadi guta
4,000,000	Kpautsuntsun eda guni	4,000,000,000	Gbagbadi guni
5,000,000	Kpautsuntsun eda gutsun	5,000,000,000	Gbagbadi gutsun
6,000,000	Kpautsuntsun eda gutswanyi	6,000,000,000	Gbagbadi gutswanyi
7,000,000	Kpautsuntsun eda gutwaba	7,000,000,000	Gbagbadi gutwaba
8,000,000	Kpautsuntsun eda gutota	8,000,000,000	Gbagbadi gutota
9,000,000	Kpautsuntsun eda gutwani	9,000,000,000	Gbagbadi gutwani
10,000,000	Kpautsuntsun eda guwo	10,000,000,000	Gbagbadi guwo

1,000,000,000,000 **1 Trilion**	Kpautsuntsun eda kpautsuntsun **(1000,000×1000) = Gbagurasa**

Enyaba zhimi kakanyi zhi [counting in different languages]

Nupe	Arabic	Roman	Italic
I	1	I	I
Ц	2	II	II
Ш	3	III	III
Ɛ	4	IV	IIII
П	5	V	IIIII
Ə	6	VI	IIIII I
Г	7	VII	IIIII II
ʁ	8	VIII	IIIII III
ρ	9	IX	IIIII IIII
IӨ	10	X	IIIII IIIII

Picture of different languages

Ge'ez numerals	-	፩ ፪ ፫ ፬ ፭ ፮ ፯ ፰ ፱ ፲ ፳ ፴ ፵ ፶ ፷ ፸ ፹ ፺
Chinese rod numerals	10	
Phoenician numerals	10	
Thai numerals	10	๐ ๑ ๒ ๓ ๔ ๕ ๖ ๗ ๘ ๙
Abjad numerals	10	ي ك ل م ن س ع ف ص ق ر ش ت ا ب ج د ه و ز ح ط
Eastern Arabic numerals	10	٠ ١ ٢ ٣ ٤ ٥ ٦ ٧ ٨ ٩
Western Arabic numerals	10	0 1 2 3 4 5 6 7 8 9
Burmese numerals	10	၀ ၁ ၂ ၃ ၄ ၅ ၆ ၇ ၈ ၉

Aegean numerals	10	
Chinese numerals, Japanese numerals, Korean numerals (Sino-Korean)	10	〇/零 一/壹 二/貳 三/參 四/肆 五/伍 六/陸 七/柒 八/捌 九/玖 十/拾
Roman numerals	10	Ⅰ Ⅱ Ⅲ Ⅳ Ⅴ Ⅵ Ⅶ Ⅷ Ⅸ Ⅹ L C D M
Hebrew numerals	10	א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ
Indian Numerals	10	Tamil ๐ ௧ ௨ ௩ ௪ ௫ ௬ ௭ ௮ ௯ Devanagari ० १ २ ३ ४ ५ ६ ७ ८ ९
Greek numerals	10	ō α β γ δ ε ζ η θ ι o A B Γ Δ E Z H Θ
Ge'ez	-	፩ ፪ ፫ ፬ ፭ ፮ ፯ ፰ ፱

Eda [Multiplication]

ц	**Ш**	**Ɛ**	**П**	**Ə**	**Г**	**ȣ**	**ρ**	**Iθ**	**II**	**Iц**
I = ц	I = Ш	I = Ɛ	I = П	I = Ə	I = Г	I = ȣ	I = ρ	I = Iθ	I = II	I = Iц
Ц = Ɛ	Ц = Ə	Ц = ȣ	Ц =Iθ	Ц = Iц	Ц = IƐ	Ц =IƏ	Ц = Iȣ	Ц = цθ	Ц = цц	Ц = цƐ
Ш = Ə	Ш = Р	Ш =Iц	Ш =IП	Ш =Iȣ	Ш =цI	Ш =цƐ	Ш =цГ	Ш =Шθ	Ш=ШШ	Ш=ШƏ
Ɛ = ȣ	Ɛ = Iц	Ɛ = IƏ	Ɛ = цθ	Ɛ = цƐ	Ɛ = цȣ	Ɛ =Шц	Ɛ =ШƏ	Ɛ = Ɛθ	Ɛ = ƐƐ	Ɛ = Ɛȣ
П = Iθ	П = IП	П =цθ	П = цП	П =Шθ	П =ШП	П = Ɛθ	П = ƐП	П = Пθ	П = ПП	П = Əθ
Ə = Iц	Ə = Iȣ	Ə = цƐ	Ə =Шθ	Ə =ШƏ	Ə = Ɛц	Ə = Ɛȣ	Ə = ПƐ	Ə = Əθ	Ə = ƏƏ	Ə = Гц
Г = IƐ	Г = цI	Г = цȣ	Г = ШП	Г = Ɛц	Г = Ɛρ	Г = ПƏ	Г = ƏШ	Г = Гθ	Г = ГГ	Г = ȣƐ
ȣ = IƏ	ȣ = цƐ	ȣ = Шц	ȣ = Ɛθ	ȣ = Ɛȣ	ȣ = ПƏ	ȣ = ƏƐ	ȣ = Гц	ȣ = ȣθ	ȣ = ȣȣ	ȣ = ρƏ
Р = Iȣ	Р = цГ	Р =ШƏ	Р = ƐП	Р = ПƐ	Р =ƏШ	Р = Гц	Р = ȣI	Р = ρθ	Р = ρρ	Р = Iθȣ
Iθ=цθ	Iθ=Шθ	Iθ =Ɛθ	Iθ =Пθ	Iθ =Əθ	Iθ = Гθ	Iθ =ȣθ	Iθ =ρθ	Iθ=Iθθ	Iθ = IIθ	Iθ =Iцθ
II = цц	II=ШШ	II = ƐƐ	II = ПП	II = ƏƏ	II = ГГ	II = ȣȣ	II = ρρ	II = IIθ	II = IцI	II = IШц
Iц=цƐ	Iц=ШƏ	Iц = Ɛȣ	Iц =Əθ	Iц = Гц	Iц = ȣƐ	Iц = ρƏ	Iц =Iθȣ	Iц =Iцθ	Iц =IШц	Iц = IƐƐ

Enyaba Nupe Tashiru [Pure nupe counting formation]

I	ц	Ш	Ɛ	П	Ə	Г	ȣ	ρ	Iθ
II	Iц	IШ	IƐ	IП	IƏ	IГ	Iȣ	Iρ	цθ
ц I	цц	цШ	цƐ	цП	цƏ	цГ	ц ȣ	ц ρ	Шθ
ШI	Шц	ШШ	ШƐ	ШП	ШƏ	ШГ	Шȣ	Шρ	Ɛθ
Ɛ I	Ɛц	ƐШ	ƐƐ	ƐП	ƐƏ	ƐГ	Ɛȣ	Ɛρ	Пθ
ПI	Пц	ПШ	ПƐ	ПП	ПƏ	ПГ	Пȣ	Пρ	Əθ
ƏI	Əц	ƏШ	ƏƐ	ƏП	ƏƏ	ƏГ	Əȣ	Əρ	Гθ
ГI	Гц	ГШ	ГƐ	ГП	ГƏ	ГГ	Гȣ	Гρ	ȣθ
ȣI	ȣц	ȣШ	ȣƐ	ȣП	ȣƏ	ȣГ	ȣȣ	ȣρ	ρθ
ρI	ρц	ρШ	ρƐ	ρП	ρƏ	ρГ	ρȣ	ρρ	Iθθ

Ba enya eda gutsun [count in five's]

П	lӨ	lП	цӨ	цП
5	10	15	20	25
ШӨ	ШП	ƐӨ	ƐП	ПӨ
30	35	40	45	50
ПП	ӘӨ	ӘП	ГӨ	ГП
55	60	65	70	75
ʁӨ	ʁП	ρӨ	ρП	lӨӨ
80	85	90	95	100

She efo zhi [fill in the gaps]

ETUN I A [exercise 1]

П				цП
	ШП			
		ӘП		
			ρП	

She efo zhi [fill in the gaps]

ETUN I B [exercise 1]

	lӨ		цӨ	
ШӨ		ƐӨ		ПӨ
	ӘӨ		ГӨ	
				lӨӨ

Ba enya eda guwo [count in ten's]

Iө	цө	Шө	Єө	Пө
10	20	30	40	50
Әө	Гө	ʁө	ρө	Iөө
60	70	80	90	100

She efo zhi [fill in the gaps]

ETUN **ц A** [exercise 2]

Iө		Шө		Пө
	Гө		ρө	

She efo zhi [fill in the gaps]

ETUN **ц B** [exercise 2]

	цө		Єө	
Әө		ʁө		

She efo zhi [fill in the gaps]

ETUN **ц C** [exercise 2]

Iө				
				Iөө

Iц

Taki zhi [symbols]

Enya lakeba	Addition	+
Enya be	Sum	+
Enya like	Subtraction	-
Enya din	Minus	-
Eda	Multiplication	×
Enya gan	Division	÷
Tsa	Point	.
wunda	Equal to	=
Eba	Square	√
Edo	Percentage	%
Nchiko gan	Greater than	>
Gbagba gan	Less than	<
Ekpe	Bracket open	[
Etsu	Bracket close	]
Egi zhi	Numbers	0123456789...
Egi mika zhi	Letters	ABCDE...

Ebagizhi [squares]

EBAZHI	EGIZHI	SQUARES
Eba	ц^{ц}	2^2
Eba guta	Ш^{Ш}	3^3
Eba gunu	Ɛ^{Ɛ}	4^4
Eba gutsun	П^{П}	5^5
Eba gutwanyin	Ə^{Ə}	6^6
Eba gutwaba	Г^{Г}	7^7
Eba gutota	ȣ^{ȣ}	8^8
Eba gutwani	ρ^{ρ}	9^9
Eba kurugi	Ɵ^{Ɵ}	0^0
Eba a	a^{a}	a^{a}

Enya Lakeba [addition]

І	ц	Ш	Ɛ	П	Ə	Г	ʁ	ρ	ІӨ
1	2	3	4	5	6	7	8	9	10
ІІ	Іц	ІШ	ІЄ	ІП	ІƏ	ІГ	Іʁ	Іρ	цӨ
11	12	13	14	15	16	17	18	19	20

Eri zhi [examples]

І. І + ц = Ш

Ц. Ц + Ш = П

Ш. Ш + П = ʁ

Etun **Ш А** [exercise 3]

І.	П + Г =	Ə.	Ц + Ш =
Ц.	Г+ Ə =	Г.	І + Ц =
Ш.	Ə + ρ =	ʁ.	П + Ш =
Ɛ.	ʁ + ρ =	ρ.	Г + П =
П.	ʁ + ІӨ =	ІӨ.	Ə + Г =

Etun **Ш В** [exercise 3]

І.	П + Г =	Ə.	Ц + П =
Ц.	П + Ə =	Г.	П + Ц =
Ш.	Ə + П =	ʁ.	П + П =
Ɛ.	П + ρ =	ρ.	Г + П =
П.	ʁ + ІӨ =	ІӨ.	П + Г =

Enya Lakeba [addition]

І	ц	Ш	Ɛ	П	Ə	Г	ɤ	ρ	ІӨ
1	2	3	4	5	6	7	8	9	10
ІІ	Іц	ІШ	ІЄ	ІП	ІƏ	ІГ	Іɤ	Іρ	цӨ
11	12	13	14	15	16	17	18	19	20

Eri zhi [examples]

І. І + ц + Ш = Ə

Ц. Ц + Ш + Ɛ = ρ

Ш. Ш + П + ɤ = ІƏ

Etun **Ɛ** A [exercise 4]

І. П + Г+ І =

Ц. Г+ Ə + Ц =

Ш. Ə + ρ + Ш =

Ɛ. ɤ + ρ + Ɛ =

П. ɤ + ІӨ + П =

Ə. Ц + Ш + ІӨ =

Г. І + Ц + ρ =

ɤ. П + Ш + ɤ =

ρ. Г + П + Г =

ІӨ. Ə + Г + Ə =

Etun **Ɛ** B [exercise 4]

І. П + Г+ ɤ =

Ц. Г+ ɤ + Ц =

Ш. Ə + ɤ + Ш =

Ɛ. ɤ + ɤ + Ɛ =

П. ɤ + ІӨ + ɤ =

Ə. Ц + Ш + ɤ =

Г. І + ɤ + ρ =

ɤ. ɤ + Ш + ɤ =

ρ. Г + ɤ + Г =

ІӨ. ɤ + Г + Ə =

Enya Lakeba [addition]

Eri zhi [examples]

I.	I	ц	ц.	ʁ	ρ	Ш.	I	
	+	Ш		+	Ө		+ ρ	
	I	П		ʁ	ρ		IӨ	

Etun **П** [exercise 5]

I.	I	Ш	ц.	ʁ	ρ	Ш.	I	
	+	Ш		+	Ɛ		+Ə	
Ɛ.	ц	Ш	П.	ρ	ρ	Ə.	Ш	
	+	Ɛ		+	Ɛ		+ П	
Г.	Ɛ	Ɛ	ʁ.	Ɛ	ρ	ρ.	I	
	+	Ш		+	Ɛ		+ʁ	
I Ө.	I	Ш	I I.	ʁ	Ө	I ц.	Ө	
	+	Ө		+	Ɛ		+Ə	
I Ш.	I	Ш	I Ɛ.	ʁ	ρ	I П.	I	
	+	ρ		+	Ə		+Ə	

Enya Lakeba [addition]

Eri zhi [examples]

I.	I	ц	ц.	ʁ	ρ	Ш.	I	
	+	Ш		+	Ө		+ ρ	
	I	П		ʁ	ρ		I Ө	

Etun ə [exercise 6]

I.	I	Ш	ц.	ʁ	ρ	Ш.	I	
	+Ɛ	Ш		+ Ɛ	Ɛ		+ə	
Ɛ.	ц	Ш	П.	ρ	ρ	ə.	Ш	
	+ ə	Ɛ		+ ə	Ɛ		+ П	
Г.	Ɛ	Ɛ	ʁ.	Ɛ	ρ	ρ.	I	
	+ ə	Ш		+ ə	Ɛ		+ʁ	
I Ө.	I	Ш	I I.	ʁ	Ө	I ц.	Ө	
	+ ə	Ө		+ ə	Ɛ		+ə	
I Ш.	I	Ш	I Ɛ.	ʁ	ρ	I П.	I	
	+ ə	ρ		+ ə	ə		+ə	

Enya Lakeba be kike e [addition with remaining]

Eri zhi [examples]

I.	I	ц	Ш	ц.	ʁ	ρ	ρ	Ш.	I		
	+		Ш		+	Ө	ρ		+	ρ	
	I	ц	Ə		ρ	Ө	ʁ		I	Ө	

Etun Г [exercise 7]

I.	ρ	ц	Ш	ц.	ʁ	ρ	ʁ	Ш.	I		
	+		ρ		+	ρ	ρ		+ʁ		
Є.	I	ц	ʁ	П.	ʁ	ρ	ʁ	Ə.	I		
	+		Ш		+	ʁ	ρ		+ʁ		
Г .	I	Є	Ш	ʁ.	ʁ	ρ	Є	ρ.	ρ		
	+		Є		+	Є	ρ		+	ρ	
I Ө.	П	П	П	I I.	ʁ	П	ʁ	Iц.	ρ		
	+		Ш	+	П	ρ	П		+	Ə	
IШ.	I	ц	Ш	IЄ.	ʁ	ρ	ʁ	IП.	ρ		
	+	Ш	Ш		+	Ш	ρ		+ʁ		

Enya Lakeba be kike e [Addition with remaining]

Eri zhi [Examples]

I.	I	ц	Ш	ц.	ʁ	ρ	ʁ	
	+		Ш		+	Θ	ρ	
	I	ц	Ə		ρ	Θ	Г	

Etun ʁ [exercise 8]

I.	Р	ц	Ш	ц.	ʁ	ρ	ʁ	Ш.	I		
	+		ʁ		+	ʁ	ʁ		+	ʁ	
Ɛ.	I	ц	ʁ	П.	ʁ	ρ	ʁ	Ə.	ʁ		
	+		ʁ		+	ʁ	ʁ		+	ʁ	
Г .	I	Ɛ	Ш	ʁ.	ʁ	ρ	Ɛ	ρ.	ʁ		
	+		Ɛ		+	Ɛ	ρ		+	ρ	
I Θ.	П	П	П	I I.	ʁ	П	ʁ	Iц.	ʁ		
	+		ʁ	+	ʁ	ρ	ʁ		+	ʁ	
IШ.	I	ц	Ш	IЄ.	ʁ	ρ	ʁ	IП.	ʁ		
	+	ʁ	ʁ		+	ʁ	ʁ		+	ʁ	

Zhelo Eganzhi [Change to words]

Eri zhi [examples]

П = Gutsun Ш = Guta I = Nini

Etun ρ A [exercise 9]

I.	ʁ =	Ц.	Ш =	Ш.	IП
Ɛ.	Г =	П.	цП =	Ə.	IӨ
Г.	цц =	ʁ.	Ə =	ρ.	Iρ
IӨ.	цƐ =	II.	IƐ =	Iц.	IƏ
IШ.	ƐI =	IƐ.	Шц =	IП.	ƐӨ

Etun ρ B [exercise 9]

I.	ʁI. =	Ц.	ШI =	Ш.	П
Ɛ.	Г =	П.	цП =	Ə.	II =
Г.	цI =	ʁ.	IƏ =	ρ.	ρ =
IӨ.	цƐ =	II.	IƐ =	Iц.	Ə
IШ.	ƐI =	IƐ.	цI=	IП.	Ө

Etun ρ C [exercise 9]

I.	Iρ =	Ц.	Шρ =	Ш.	Пρ
Ɛ.	Г =	П.	цП =	Ə.	ρI
Г.	цρ =	ʁ.	ρƏ =	ρ.	ρρ
IӨ.	Ɛρ =	II.	ρƐ =	Iц.	Əρ
IШ.	Ɛ =	IƐ.	ц =	IП.	ρӨ

цI

Zhelo Eganzhi [change to words]

Eri zhi [examples]

П = Gutsun Ш = Guta І = Nini

Etun ІӨ A [exercise 10]

І.	ʁӨ =	Ц.	ШӨ =	Ш.	ІПӨ =
Ɛ.	ГӨ =	П.	цПӨ =	Ə.	ІӨӨ =
Г.	ццӨ =	ʁ.	ƏӨ=	ρ.	ІρӨ =
ІӨ.	цƐӨ =	ІІ.	ІƐӨ =	Іц.	ІƏӨ =
ІШ.	ƐӨІ =	ІƐ.	ШцӨ =	ІП.	ƐӨӨ =

Etun ІӨ B [exercise 10]

І.	ʁ ІІ =	Ц.	ІШІ =	Ш.	ІП =
Ɛ.	ГІ =	П.	ІцП =	Ə.	ІІІ =
Г.	ц ІІ =	ʁ.	ІІƏ =	ρ.	ρІ =
ІӨ.	ц ІƐ =	ІІ.	ІІƐ =	Іц.	ƏІ =
ІШ.	ƐІІ =	ІƐ.	ІцІ=	ІП.	ІӨ =

Etun ІӨ C [exercise 10]

І.	ІρƏ =	Ц.	ШρƏ =	Ш.	ПρƏ =
Ɛ.	ГƏ =	П.	цПƏ =	Ə.	ρІƏ =
Г.	цρƏ =	ʁ.	ƏρƏ =	ρ.	ρ Əρ =
ІӨ.	ƐρƏ =	ІІ.	ρƐƏ =	Іц.	ƏρƏ =
ІШ.	ƐƏ =	ІƐ.	цƏ =	ІП.	ρӨƏ =

Цц

Zhelo Egizhi [change to numbers]

Eri zhi [examples]

Gutsun = П Guta = Ш Nini = I

Etun II A [exercise 11]

I. Gutota = Ц. Guta = Ш. Gwegi =

Ɛ. Gutota = П. Guba = Ə. Guwo be guni =

Г. Gutsun = ʁ. Nini = ρ. Guwo be guba e =

IӨ. Gutwanyi = II. Guwo = Iц. Guwo be guta I

IШ. Guni = IƐ. Gutwani = IП. Guwo be ni =

Etun II B [exercise 11]

I. Eshi = Ц. Guni = Ш. Gwegi be guta e =

Ɛ. Shita be guba e = П. Guba = Ə. Guwo be ni =

Г. Shini be gutsun = ʁ. Eshi be gutsun i = ρ. Gbanwo =

IӨ. Shitsun twaba = II. Shitsu = Iц. Arata =

IШ. Shitsun guba = IƐ. Shini = IП. Shita =

Etun II c [exercise 11]

I. Eshi be guni = Ц. Adwani = Ш. Shiba be guwo e =

Ɛ. Shita be guba e = П. Shitsun guta = Ə. Guwo be nini =

Г. Shini be gutsun = ʁ. Eshi be gutsun i = ρ. Gbanwo

IӨ. Shitsun twaba = II. Shitsu = Iц. Arata =

IШ. Shitsun guba = IƐ. Shini = IП. Shita =

ЦШ

Zhelo Egizhi [change to numbers]

Eri zhi [examples]

Gutsun = П Guta = Ш Nini = I

Etun Iц A [exercise 12]

I. Guwo = Ц. Gutwani = Ш. Gwegi be guba e =

Ɛ. Gutota = П. Guba = Ə. Guwo be guta e =

Г. Gutwanyi = ʁ. Guta = ρ. Guwo be guba e =

IӨ. Gutwani = II. Guwo = Iц. Guwo be nini =

IШ. Gwegi = IƐ. Gbanwo be gutsun = IП. Eshi be guba e =

Etun Iц B [exercise 12]

I. Shiba = Ц. Shita = Ш. Shini =

Ɛ. Gutsun = П. Guwo = Ə. Gwegi =

Г. Arata = ʁ. Shitsun = ρ. Shitwanyi =

IӨ. Shitsun be nini = II. Shitsu be guba e = Iц. Arata be guta =

IШ. Shitsun guta = IƐ. Shini gutsun e = IП. Shita be guni =

Etun Iц C [exercise 12]

I. Eshi be gutwanyi = Ц. Adwani be guta e = Ш. Shiba be guwo e =

Ɛ. Shita be guba e = П. Shitsun guta = Ə. Guwo be guta e =

Г. Shini be gutsun = ʁ. Eshi be gutsun i = ρ. Gbanwo be guta e=

IӨ. Shitsun twaba = II. Shitsu be guni e = Iц. Arata be guba e =

IШ. Shitsun guni = IƐ. Shini be guni = IП. Shita be guni =

Цɛ

Gbagba gan, Wunda, Nciko gan < = >

[less than, equal to, greater than]

A egi nazhi gonyi na dan kungu o **[**put the appropriate symbols in the box**]**

Eri zhi [examples]

I. I [<] ц ц. П [>] Ш Ш. Ə [=] Ə

Etun **IШ A** [exercise 13]

I. I [ ] Ө ц. [=] Ш Ш. ρ [ ] Ə

Ɛ. Ə [ ] ц П. П [ ] Ə Ə. Ə [ ] Ə

Г. IӨ [ ] ц ɤ. [=] Ш ρ. I [ ] IӨ

IӨ. [=] ц II. П [=] Iц. [=] IӨ

IШ. I [ ] ц IƐ. П [ ] Ш IП. Ə [ ] Ə

Etun **IШ B** [exercise 13]

I. I [ ] IӨ ц. [=] IШ Ш. ρ [ ] IƏ

Ɛ. Ə [ ] цI П. П [ ] ƏI Ə. Ə [ ] ƏI

Г. IӨ [ ] Iц ɤ. [=] ШI ρ. I [ ] IIӨ

IӨ. [=] ц II. П [ ] I Iц. [=] IIӨ

IШ. I I [ ] ц IƐ. I [=] IП. Ə [ ] IƏ

Etun **IШ C** [exercise 13]

I. I [ ] Ө + Ɛ ц. [=] Ш+ Ɛ Ш. ρ [ ] Ə+ Ɛ

Ɛ. Ə [ ] ц + Г П. П [ ] Ə + Г Ə. Ə [ ] Ə + Г

Г. IӨ [ ] ц + П ɤ. [=] Ш + П ρ. I [ ] IӨ + П

IӨ. [=] ц + ɤ II. [=] П + ɤ Iц. [=] IӨ+ ɤ

IШ. I [ ] ц +Ш IƐ. П [ ] Ш+Ш IП. Ə [ ] Ə +Ш

Gbagba gan, Wunda, Nciko gan < = >

[less than, equal to, greater than]

A egi nazhi gonyi na dan kungu o **[**put the appropriate symbols in the box**]**

Eri zhi [examples]

I.	Шц + ц Ɛ	=	Шц + ц Ɛ	ц.	Шц + ШӨ	>	Шц + ц Ɛ

Etun **Iɛ** A [exercise 14]

I.	Iɛ + ц Ɛ		Шц + ц Ɛ	ц.	Шц + Iʁ		Шц + ц Ɛ
Ш.	Шц + Iɛ		Шц + ц Ɛ	Ɛ.	Шц + ШӨ		Iʁ + ц Ɛ
П.	Шц + ц Ɛ		Iɛ + ц Ɛ	Ə.	Iʁ + ШӨ		Шц + ц Ɛ
Г.	Шц + ц Ɛ		Шц + Iɛ	ʁ.	Шц + ШӨ		Iʁ + ц Ɛ
ρ.	Шц + Iɛ		Шц + ц Ɛ	IӨ.	Iʁ + ШӨ		Шц + ц Ɛ

Etun **Iɛ** B [exercise 14]

I.	Шц + ПП		ПП + ц Ɛ	ц.	Шц + ПП		Əц + ц Ɛ
Ш.	Шц + ПП		Шц + ц Ɛ	Ɛ.	ПП + ШӨ		Шц + Əц
П.	ПП + ц Ɛ		Шц + ц Ɛ	Ə.	Шц + ПП		Əц + ц Ɛ
Г.	Шц + ПП		Шц + ц Ɛ	ʁ.	ПП + ШӨ		Шц + Əц
ρ.	ПП + ц Ɛ		Шц + ц Ɛ	IӨ.	Шц + ПП		Əц + ц Ɛ

Etun **Iɛ** C [exercise 14]

I.	ПШ + ПП		ПП + ПШ	ц.	Шц + ПП		Əц + ПШ
Ш.	Шц + ПП		Шц + ц Ɛ	Ɛ.	ПШ + ШӨ		Шц + Əц
П.	ПП + ПШ		Шц + ц Ɛ	Ə.	Шц + ПП		Əц + ц Ɛ
Г.	Шц + ПП		ПШ + ц Ɛ	ʁ.	ПП + ПШ		Шц + Əц
ρ.	ПП + ПШ		Шц + ц Ɛ	IӨ.	ПШ + ПП		Əц + ц Ɛ

Gbagba gan, Wunda, Nciko gan < = >

[less, equal to, greater than]

A egi nazhi gonyi na dan kungu o **[**put the appropriate symbols in the box**]**

Eri zhi [examples]

I.	Nin	=	nini	ц.	Gutsu	>	guta

Etun **IП** A [exercise 15]

I.	Guwo		nin	ц.	Guta		
Ш.	Gwegi		eshi	Ɛ.	Gbanwo		
П.	Gutwani		guta	Ə.	Guwo		
Г.	Guni		gutwanyi	ʁ.	Guta		
ρ.	Guba		gutota	IӨ.	Gutsun		

Etun **IП** B [exercise 15]

I.	Guwo		Ш	ц.	Guta		
Ш.	Gwegi		Ш	Ɛ.	Gbanwo		
П.	Gutwani		Ɛ	Ə.	Guwo		
Г.	Guni		П	ʁ.	Guta		
ρ.	Guba		Ə	IӨ.	Gutsun		

Etun **IП** C [exercise 15]

I.	Guwo		Ш + Ө	ц.	Guta		
Ш.	Gwegi		Ш + I	Ɛ.	Gbanwo		
П.	Gutwani		Ɛ + ц	Ə.	Guwo		
Г.	Guni		П + Ш	ʁ.	Guta		
ρ.	Guba		Ə + Ɛ	IӨ.	Gutsun		

Gbagba gan, Wunda, Nciko gan < = >

[less than, equal to, greater than]

A egi nazhi gonyi na dan kungu o **[**put the appropriate symbols in the box**]**

Eri zhi [examples]

I. I [<] ц ц. П [>] Ш Ш. ə [=] ə

Etun **I**ə A [exercise 16]

I. I [ ] Ө - Ө ц. [=] Ш- Ш Ш. ρ - ə – ц [=]

Ɛ. ə [ ] ц - I П. П [ ] ə - ц ə. ə - ə - ц [ ]

Г. IӨ[ ] ц - ц ʁ. [=] Ш- ц ρ. I - IӨ – ц [=]

IӨ. [=] ц - Ө II. П [=] ə - I Iц. IӨ- ц [=]

IШ. I [ ] ц - ц IƐ. П [ ] Ш - ц IП. ə - ə – ц [=]

Etun **I**ə B [exercise 16]

I. I [ ] IӨ - Ө ц. [=] IШ - ц Ш. Iə – ц [=]

Ɛ. ə [ ] Цi - I П. П [ ] əI - ц ə. əI - ц [ ]

Г. IӨ[ ] Iц - ц ʁ. [=] ШI - ц ρ. IIӨ- ц [=]

IӨ. [=] ц - ц II. П [ ] I - ц Iц. IIӨ -ц [=]

IШ. I I[ ] ц - ц IƐ. I [=] IП. Iə- ц [=]

Etun **I**ə C [exercise 16]

I. I [ ] П - Ɛ ц. [=] Ш- ц Ш. ə- ц [ ] ə

Ɛ. ə [ ] Г - П П. П [ ] ə - ц ə. ə – ц [ ] ə

Г. IӨ[ ] П - ц ʁ. [=] Ш - ц ρ. IӨ – ц [ ] ə

IӨ. [=] ʁ - ц II. [=] П - ц Iц. IӨ – ц [ ] ə

IШ. I [ ] Ш - ц IƐ. П [ ] Ш - ц IП. ə – ц [ ] ə

Gbagba gan, Wunda, Nciko gan < = >

[less than, equal to, greater than]

A egi nazhi gonyi na dan kungu o **[**put the appropriate symbols in the box**]**

Eri zhi [examples]

I.	Шц - цƐ	=	Шц - цƐ	ц.	Шц - ШӨ	>	Шц - ц Ɛ

Etun **IГ** A [exercise 17]

I.	IƐ + ц Ɛ		Шц -IƐ	ц.	Шц -IƐ		Шц + ц Ɛ
Ш.	Шц + IƐ		Шц -IƐ	Ɛ.	Шц -IƐ		Iʁ + ц Ɛ
П.	Шц + ц Ɛ		IƐ -IƐ	Ə.	Iʁ -IƐ		Шц + ц Ɛ
Г.	Шц + ц Ɛ		Шц -IƐ	ʁ.	Шц -IƐ		Iʁ + ц Ɛ
ρ.	Шц + IƐ		Шц -IƐ	IӨ.	Iʁ - IƐ		Шц + ц Ɛ

Etun **IГ** B [exercise 17]

I.	Шц - П		ПП	ц.	Шц + ПП		Əц
Ш.	Шц + ПП		Шц	Ɛ.	ПП + ШӨ		Шц
П.	ПП + ц Ɛ		Шц	Ə.	Шц + ПП		Əц
Г.	Шц + ПП		Шц	ʁ.	ПП + ШӨ		Шц
ρ.	ПП + ц Ɛ		Шц	IӨ.	Шц + ПП		Əц

Etun **IГ** C [exercise 17]

I.	ПШ × ПП		ПП + ПШ	ц.	Шц + ПП		Əц × ПШ
Ш.	Шц × ПП		Шц + ц Ɛ	Ɛ.	ПШ + ШӨ		Шц Əц
П.	ПП × ПШ		Шц + ц Ɛ	Ə.	Шц + ПП		Əц × ц Ɛ
Г.	Шц × ПП		ПШ + ц Ɛ	ʁ.	ПП + ПШ		Шц Əц
ρ.	ПП × ПШ		Шц + ц Ɛ	IӨ.	ПШ + ПП		Əц × ц Ɛ

Gbagba gan, Wunda, Nciko gan < = > [less than, equal to, greater than]
A egi nazhi gonyi na dan kungu o **[**put the appropriate symbols in the box**]**

Eri zhi [examples]

I.	Nin	=	nini	ц.	Gutsu	>	guta

Etun **I**ʁ A [exercise 18]

I.	Guwo		nin × guba	ц.	Guta		gwegi
Ш.	Gwegi		eshi × guta	Ɛ.	Gbanwo		guni
П.	Gutwani		guta × guni	Ə.	Guwo		arata
Г.	Guni		gutwanyi	ʁ.	Guta		guta
ρ.	Guba		gutota	IӨ.	Gutsun		gutwanyi

Etun **I**ʁ B [exercise 18]

I.	Guwo		Ш × nini	ц.	Guta		Г × kurugi
Ш.	Gwegi		Ш × guba	Ɛ.	Gbanwo		ʁ × nini
П.	Gutwani		Ɛ × guta	Ə.	Guwo		ρ × guba
Г.	Guni		П × guni	ʁ.	Guta		IӨ × guta
ρ.	Guba		Ə × gutsun	IӨ.	Gutsun		II × guni

Etun **I**ʁ C [exercise 18]

I.	Guwo		Ш × Ө	ц.	Guta		Г × П
Ш.	Gwegi		Ш× I	Ɛ.	Gbanwo		ʁ × Ə
П.	Gutwani		Ɛ × ц	Ə.	Guwo		ρ × Г
Г.	Guni		П × Ш	ʁ.	Guta		IӨ × Ө

Edo be Kpetso e [percentage and fraction]

A egi nanazhi zheda kpetso [change to fraction]

Eri zhi [examples]

Edo % ШӨ = $\frac{\text{ШӨ}}{\text{ІӨӨ}}$

Kpetso $\frac{\text{І}}{\text{ц}}$

Etun **Іρ** A [exercise 19]

І.	ПӨ% =	ц.	ЄӨ% =	Ш.	ШӨ% =
Є.	ІӨ% =	П.	ІП % =	Ә.	цӨ% =
Г.	цП% =	ȣ.	ШП % =	ρ.	ЄП % =
ІӨ.	ȣ % =	ІІ.	Є% =	Іц.	Ш% =
ІШ.	П% =	ІЄ.	Ә % =	ІП.	Ө% =
ІӘ.	ІӨӨ % =	ІГ.	ЄӨӨ% =	Іȣ.	ШӨӨ% =
Іρ.	ПӨӨ% =	цӨ.	ӘӨӨ % =	цІ.	ӨӨӨ% =

Etun **Іρ** B [exercise 19]

І.	ПӨӨ% =	ц.	ЄӨӨ% =	Ш.	ШӨӨ% =
Є.	ІӨӨ% =	П.	ІПӨ % =	Ә.	цӨӨ% =
Г.	цПӨ% =	ȣ.	ШПӨ % =	ρ.	ЄПӨ % =
ІӨ.	ȣӨ % =	ІІ.	ЄӨ% =	Іц.	ШӨ% =
ІШ.	ПӨ% =	ІЄ.	ӘӨ % =	ІП.	ӨӨ% =
ІӘ.	ІӨӨӨ % =	ІГ.	ЄӨӨ% =	Іȣ.	ШӨӨ% =
Іρ.	ПӨӨӨ% =	цӨ.	ӘӨӨӨ % =	цІ.	ӨӨӨӨ% =

Edo be Kpetso e [percentage and fraction]

Liake zhin gbagbangi [reduce to the lowest term]

Eri zhi [examples]

Edo %

$$ШӨ = \frac{шө}{іөө} = \frac{ш}{іө}$$

Kpetso $\frac{I}{ц}$

Etun **Iρ** A [exercise 19]

I.	ПӨ% =	ц.	ƐӨ% =	Ш.	ШӨ% =
Ɛ.	IӨ% =	П.	IП % =	Ə.	цӨ% =
Г.	цП% =	ɤ.	ШП % =	ρ.	ƐП % =
IӨ.	ɤ % =	II.	Ɛ% =	Iц.	Ш% =
IШ.	П% =	IƐ.	Ə % =	IП.	Ө% =
IƏ.	IӨӨ % =	IГ.	ƐӨӨ% =	Iɤ.	ШӨӨ% =
Iρ.	ПӨӨ% =	цӨ.	ƏӨӨ % =	цI.	ӨӨӨ% =

Etun **Iρ** B [exercise 19]

I.	ПӨӨ% =	ц.	ƐӨӨ% =	Ш.	ШӨӨ% =
Ɛ.	IӨӨ% =	П.	IПӨ % =	Ə.	цӨӨ% =
Г.	цПӨ% =	ɤ.	ШПӨ % =	ρ.	ƐПӨ % =
IӨ.	ɤӨ % =	II.	ƐӨ% =	Iц.	ШӨ% =
IШ.	ПӨ% =	IƐ.	ƏӨ % =	IП.	ӨӨ% =
IƏ.	IӨӨӨ % =	IГ.	ƐӨӨ% =	Iɤ.	ШӨӨ% =
Iρ.	ПӨӨӨ% =	цӨ.	ƏӨӨӨ % =	цI.	ӨӨӨӨ%

Edo be Kpetso e [percentage and fraction]

Wa IӨ% za [find 10%]

Eri zhi [examples]

Edo % $\quad ШӨ = \frac{Ше}{Iее} \times IӨ\% = \frac{Ше}{Iее} \times \frac{IӨ}{Iее} = \frac{Шеө}{Iееөө} =$

$\frac{Ш}{Iее}$

Kpetso $\frac{I}{ц}$

Etun **Iρ** A [exercise 19]

I.	ПӨ% =	ц.	ЄӨ% =	Ш.	ШӨ% =
Є.	IӨ% =	П.	IП % =	Ə.	цӨ% =
Г.	цП% =	ɤ.	ШП % =	ρ.	ЄП % =
IӨ.	ɤ % =	II.	Є% =	Iц.	Ш% =
IШ.	П% =	IЄ.	Ə % =	IП.	Ө% =
IƏ.	IӨӨ % =	IГ.	ЄӨӨ% =	Iɤ.	ШӨӨ% =
Iρ.	ПӨӨ% =	цӨ.	ƏӨӨ % =	цI.	ӨӨӨ% =

Etun **Iρ** B [exercise 19]

Wa **ц**Ө% za [find 20%]

I.	ПӨӨ% =	ц.	ЄӨӨ% =	Ш.	ШӨӨ% =
Є.	IӨӨ% =	П.	IПӨ % =	Ə.	цӨӨ% =
Г.	цПӨ% =	ɤ.	ШПӨ % =	ρ.	ЄПӨ % =
IӨ.	ɤӨ % =	II.	ЄӨ% =	Iц.	ШӨ% =
IШ.	ПӨ% =	IЄ.	ƏӨ % =	IП.	ӨӨ% =
IƏ.	IӨӨӨ % =	IГ.	ЄӨӨ% =	Iɤ.	ШӨӨ% =
Iρ.	ПӨӨӨ% =	цӨ.	ƏӨӨӨ % =	цI.	ӨӨӨӨ%

ШШ

Kpetso be Edo e [fraction and percentage]

A egi nana zhi zheda edo [change to percentage]

Eri zhi [examples]

Edo % $\frac{\text{Ш}}{\text{Іөө}}$ = Ш%

Kpetso $\frac{\text{І}}{\text{ц}}$

Etun **ц**Ө [exercise 20]

І.	$\frac{\text{ц}}{\text{Іөө}}$ =	ц.	$\frac{\text{ε}}{\text{Іөө}}$ =	Ш.	$\frac{\text{П}}{\text{Іөө}}$=
Ɛ.	$\frac{\text{ə}}{\text{Іөө}}$ =	П.	$\frac{\text{əə}}{\text{Іөө}}$ =	Ə.	$\frac{\text{Пρ}}{\text{Іөө}}$=
Г.	$\frac{\text{ρ}}{\text{Іөө}}$ =	ɤ.	$\frac{\text{ερ}}{\text{Іөө}}$ =	ρ.	$\frac{\text{ПШ}}{\text{Іөө}}$=
ІӨ.	$\frac{\text{цШ}}{\text{Іөө}}$ =	ІІ.	$\frac{\text{ЄШ}}{\text{Іөө}}$ =	Іц.	$\frac{\text{ПП}}{\text{Іөө}}$=
ІШ.	$\frac{\text{цП}}{\text{Іөө}}$ =	ІЄ.	$\frac{\text{ЄП}}{\text{Іөө}}$ =	ІП.	$\frac{\text{Пв}}{\text{Іөө}}$=
ІƏ.	$\frac{\text{цв}}{\text{Іөө}}$ =	ІГ.	$\frac{\text{Єв}}{\text{Іөө}}$ =	Іɤ.	$\frac{\text{вП}}{\text{Іөө}}$=
Іρ.	$\frac{\text{вц}}{\text{Іөө}}$ =	цӨ.	$\frac{\text{вЄ}}{\text{Іөө}}$ =	цІ.	$\frac{\text{П}}{\text{Іөө}}$=
цц.	$\frac{\text{цц}}{\text{Іөө}}$ =	цШ.	$\frac{\text{Єц}}{\text{Іөө}}$ =	цЄ.	$\frac{\text{Пц}}{\text{Іөө}}$=
цП.	$\frac{\text{ц}}{\text{Іөө}}$ =	цƏ.	$\frac{\text{цЄ}}{\text{Іөө}}$ =	цГ.	$\frac{\text{цП}}{\text{Іөө}}$=
цɤ.	$\frac{\text{цІ}}{\text{Іөө}}$ =	цρ.	$\frac{\text{ІЄ}}{\text{Іөө}}$ =	ШӨ	$\frac{\text{П}}{\text{Іөө}}$=
ШІ.	$\frac{\text{Іц}}{\text{Іөө}}$ =	Шц.	$\frac{\text{ЄІ}}{\text{Іөө}}$ =	ШШ.	$\frac{\text{ПІ}}{\text{Іөө}}$=
ШЄ.	$\frac{\text{ц}}{\text{Іөө}}$ =	ШП.	$\frac{\text{ε}}{\text{Іөө}}$ =	ШƏ.	$\frac{\text{ІП}}{\text{Іөө}}$=
ШГ.	$\frac{\text{цөө}}{\text{Іөө}}$ =	Шɤ.	$\frac{\text{Єөө}}{\text{Іөө}}$ =	Шρ.	$\frac{\text{Пөө}}{\text{Іөө}}$=

Kpetso be Edo e [fraction and percentage]

A eginnazhi zheda edo [change to percentage]

Eri zhi [examples]

Edo % $\text{П}\frac{\text{Ш}}{\text{ІӨӨ}} = \text{ПӨШ\%}$

Kpetso $\frac{\text{І}}{\text{ц}}$

Etun **цІ** [exercise 21]

І.	$\text{І}\frac{\text{ц}}{\text{ІӨӨ}} =$	ц.	$\text{І}\frac{\text{Є}}{\text{ІӨӨ}} =$	Ш.	$\text{І}\frac{\text{П}}{\text{ІӨӨ}} =$
Є.	$\text{ц}\frac{\text{Ә}}{\text{ІӨӨ}} =$	П.	$\text{ц}\frac{\text{ӘӘ}}{\text{ІӨӨ}} =$	Ә.	$\text{ц}\frac{\text{Пр}}{\text{ІӨӨ}} =$
Г.	$\text{Ш}\frac{\text{р}}{\text{ІӨӨ}} =$	ȣ.	$\text{Ш}\frac{\text{Єр}}{\text{ІӨӨ}} =$	р.	$\text{Ш}\frac{\text{ПШ}}{\text{ІӨӨ}} =$
ІӨ.	$\text{Є}\frac{\text{цШ}}{\text{ІӨӨ}} =$	ІІ.	$\text{Є}\frac{\text{ЄШ}}{\text{ІӨӨ}} =$	Іц.	$\text{Є}\frac{\text{ПП}}{\text{ІӨӨ}} =$
ІШ.	$\text{П}\frac{\text{цП}}{\text{ІӨӨ}} =$	ІЄ.	$\text{П}\frac{\text{ЄП}}{\text{ІӨӨ}} =$	ІП.	$\text{П}\frac{\text{Пȣ}}{\text{ІӨӨ}} =$
ІӘ.	$\text{Ә}\frac{\text{цȣ}}{\text{ІӨӨ}} =$	ІГ.	$\text{Ә}\frac{\text{Єȣ}}{\text{ІӨӨ}} =$	Іȣ.	$\text{Ә}\frac{\text{ȣП}}{\text{ІӨӨ}} =$
Ір.	$\text{Г}\frac{\text{ȣц}}{\text{ІӨӨ}} =$	цӨ.	$\text{Г}\frac{\text{ȣЄ}}{\text{ІӨӨ}} =$	цІ.	$\text{Г}\frac{\text{П}}{\text{ІӨӨ}} =$
цц.	$\text{ȣ}\frac{\text{цц}}{\text{ІӨӨ}} =$	цШ.	$\text{ȣ}\frac{\text{Єц}}{\text{ІӨӨ}} =$	цЄ.	$\text{ȣ}\frac{\text{Пц}}{\text{ІӨӨ}} =$
цП.	$\text{р}\frac{\text{ц}}{\text{ІӨӨ}} =$	цӘ.	$\text{р}\frac{\text{цЄ}}{\text{ІӨӨ}} =$	цГ.	$\text{р}\frac{\text{цП}}{\text{ІӨӨ}} =$
цȣ.	$\text{ІӨ}\frac{\text{цІ}}{\text{ІӨӨ}} =$	цр.	$\text{ІӨ}\frac{\text{ІЄ}}{\text{ІӨӨ}} =$	ШӨ	$\text{ІӨ}\frac{\text{П}}{\text{ІӨӨ}} =$
ШІ.	$\text{ІІ}\frac{\text{Іц}}{\text{ІӨӨ}} =$	Шц.	$\text{ІІ}\frac{\text{ЄІ}}{\text{ІӨӨ}} =$	ШШ.	$\text{ІІ}\frac{\text{ПІ}}{\text{ІӨӨ}} =$
ШЄ.	$\text{Іц}\frac{\text{ц}}{\text{ІӨӨ}} =$	ШП.	$\text{Іц}\frac{\text{Є}}{\text{ІӨӨ}} =$	ШӘ.	$\text{Іц}\frac{\text{ІП}}{\text{ІӨӨ}} =$
ШГ.	$\text{ІШ}\frac{\text{цӨӨ}}{\text{ІӨӨ}} =$	Шȣ.	$\text{ІШ}\frac{\text{ЄӨӨ}}{\text{ІӨӨ}} =$	Шр.	$\text{ІШ}\frac{\text{ПӨӨ}}{\text{ІӨӨ}} =$

ШП

Enya Like [subtraction]

І	ц	Ш	Ɛ	П	Ə	Г	ʁ	ρ	ІӨ
1	2	3	4	5	6	7	8	9	10
ІІ	Іц	ІШ	ІЄ	ІП	ІƏ	ІГ	Іʁ	Іρ	цӨ
11	12	13	14	15	16	17	18	19	20

Eri zhi [examples]

І. П - ц = Ш

Ц. Ц - ц = Ө

Ш. П -Ш = Ц

Etun **цц A** [exercise 22]

І.	Г - Ш =	Ə.	Ш - І =
Ц.	Ə - Ш =	Г.	І - І =
Ш.	Р - Ш =	ʁ.	П - І =
Ɛ.	ʁ - Ш =	ρ.	Г - П =
П.	ІӨ- Ш =	ІӨ.	Ə - І =

Etun **цц B** [exercise 22]

І.	П - ц =	Ə.	Ц - ц =
Ц.	Ə - ц =	Г.	П - Ц =
Ш.	Ə - П =	ʁ.	П - П =
Ɛ.	Р - П =	ρ.	Г - П =
П.	ІӨ - ʁ =	ІӨ.	Г - Ɛ =

ШШ

Enya Lakeba be enya like e [addition and subtraction]

І	ц	Ш	Ɛ	П	Ə	Г	ʁ	ρ	ІӨ
1	2	3	4	5	6	7	8	9	10
ІІ	Іц	ІШ	ІЄ	ІП	ІƏ	ІГ	Іʁ	Іρ	цӨ
11	12	13	14	15	16	17	18	19	20

Eri zhi [examples]

І. Ɛ + ц - Ɛ = ц

Ц. Ц +Ш - Ц= Ш

Ш. Ш + П - ʁ = Ө

Etun **Цш А** [exercise 23]

І.	П + Г- І =	Ə.	Ц + Ш - І =
Ц.	Г+ Ə - Ц =	Г.	І + ρ - П =
Ш.	Ə + ρ - Ш =	ʁ.	П + Ш - ʁ =
Ɛ.	ʁ + ρ - Ɛ =	ρ.	Г + П - Г =
П.	ʁ + ІӨ - П =	ІӨ.	Ə + Г - Ə =

Etun **Цш В** [exercise 23]

І.	П + Г- ʁ =	Ə.	Ш + ʁ - Ш =
Ц.	Г+ ʁ -Ц =	Г.	І + ʁ - ρ =
Ш.	Ə + ʁ - Ш =	ʁ.	ʁ + Ш - ʁ =
Ɛ.	ʁ + ʁ - Ɛ =	ρ.	Г + ʁ - Г =
П.	ʁ + ІӨ - ʁ =	ІӨ.	ʁ + Г - Ə =

Шɛ

Enya Like e [subtraction]

Eri zhi [examples]

І.	І	Ш	ц.	П	Ш	Ш.	І І	
	-	Ш		-	ρ		-ρ	
	І	Ө		**Ɛ**	**Ɛ**		ц	

Etun **Цɛ** [exercise 24]

І.	І	Ш	ц.	ʁ	ρ	Ш.	І	
	-	Ш		-	Ɛ		- П	
Ɛ.	ц	Ш	П.	ρ	ρ	Ә.	Ш	
	-	Ɛ		-	Ɛ		-П	
Г.	Ɛ	Ɛ	ʁ.	Ɛ	ρ	ρ.	І	
	-	Ш		-	Ɛ		-ʁ	
І Ө.	І	Ш	І І.	ʁ	Ө	І ц.	Ө	
	-	Ө		-	Ɛ		- Ә	
І Ш.	І	Ш	І Ɛ.	ʁ	ρ	І П.	ІП	
	-	ρ		-	Ә		-Ә	

ШП

Enya Like e [subtraction]

Eri zhi [examples]

І.	І	Ш	ц.	П	Ш	Ш.	І	П
	-	Ш		-	ρ		-	Г
	І	Ө		Ɛ	Ɛ		ʁ	

Etun **ЦП** [exercise 25]

І.	Ɛ	Ш	ц.	ʁ	ρ	Ш.	І	Ə
	- Ɛ	Ш		- Ɛ	Ɛ		-	Ə
Ɛ.	ц	Ш	П.	ρ	ρ	Ə.		Ш
	-Ө	Ɛ		- Ə	Ɛ		-	Ө
Г.	Ɛ	Ɛ	ʁ.	Ɛ	ρ	ρ.		І
	-	Ш		-	Ɛ		-	Ө
І Ө.	Ə	Ш	І І.	ʁ	Ө	І ц.		Ө
	- Ə	Ө		- Ə	Ɛ		-	
І Ш.	І	Ш	І Ɛ.	ʁ	ρ	І П.		Ə
	-	ρ		-	Ə		-	Ə

Шə

Enya Like e [subtraction]

Eri zhi [examples]

І.	І	ц	Ш	ц.	ʁ	ρ	ρ	Ш.	І	ʁ	
	-		Ш		-	Ө	ρ		-	ρ	
	І	ц	Ө		ʁ	ρ	Ө			ρ	

Etun **цә** [exercise 26]

І.	ρ	ц	Ш	ц.	ʁ	ρ	ʁ	Ш.	Ә		
	-		ρ			ρ	ρ		-	Ә	
Є.	І	ц	ʁ	П.	ʁ	ρ	ʁ	Ә.	Ә	І	
	-		Ш		-	ʁ	ρ		-	Ә	
Г.	І	Є	Ш	ʁ.	ʁ	ρ	Є	ρ.	Єә		
	-		Є		-	Є	ρ		-	Єц	
І Ө.	П	П	П	І І.	ʁ	П	ʁ	Іц.	Ә		
	-		Ш	-		ρ	Ө		-	Ө	
ІШ.	І	ц	Ш	ІЄ.	ʁ	ρ	ʁ	ІП.	І		
	-	Ш	Ш		-	Ш	ρ		-	Ө	

ШГ

Enya Like e [subtraction]

Eri zhi [examples]

Ⅰ.
```
  Ⅰ  ц  Ш
  -     Ш
 ---------
  Ⅰ  ц  Ө
 ---------
```

ц.
```
  ʁ  ρ  ρ
  -  Ө  ρ
 ---------
  ʁ  ρ  Ө
 ---------
```

Ш.
```
  Ⅰ ʁ
  - ρ
 -----
    ρ
 -----
```

Etun **цГ** [exercise 27]

Ⅰ.
```
  Ρ  ц  Ш
  -     ʁ
 ---------
 ---------
```

ц.
```
  ʁ  ρ  ʁ
  -  ʁ  ʁ
 ---------
 ---------
```

Ш.
```
  Ⅰ ρ
  - ʁ
 -----
 -----
```

Ɛ.
```
  Ⅰ  ц  ʁ
  -  Ə  Ə
 ---------
 ---------
```

П.
```
  ʁ  ρ  ʁ
  -  ʁ  ʁ
 ---------
 ---------
```

Ə.
```
  Əʁ
  - Ə
 -----
 -----
```

Г.
```
  Ⅰ  Ɛ  Ш
  -     Ɛ
 ---------
 ---------
```

ʁ.
```
  ʁ  ρ  Ɛ
  -  Ɛ  ρ
 ---------
 ---------
```

ρ.
```
  ƐƏ
  - ʁ
 -----
 -----
```

Ⅰ Ө.
```
  П  П  П
  -     ʁ
 ---------
 ---------
```

Ⅰ Ⅰ.
```
  ʁ  П  ʁ
 - ʁ  ρ  ʁ
 ---------
 ---------
```

Ⅰц.
```
  П
  - ц
 -----
 -----
```

ⅠШ.
```
  Ⅰ  ц  Ш
  -  ʁ  ʁ
 ---------
 ---------
```

ⅠƐ.
```
  ʁ  ρ  ʁ
  -  ʁ  ʁ
 ---------
 ---------
```

ⅠП.
```
  ⅠƏ
  - ʁ
 -----
 -----
```

Egimikazhi be Egizhi tswa e [letters and numbers formation]

Aa	Bb	Cc	Dd	Ee
I	ц	Ш	Ɛ	П
Ff	Gg	Hh	Ii	Jj
Ə	Г	ʁ	ρ	IӨ
Kk	Ll	Mm	Nn	Oo
Il	Iц	IШ	IƐ	IП
Pp	Rr	Ss	Tt	Uu
IƏ	IГ	Iʁ	Iρ	цӨ
Vv	Ww	Yy	Zz	
цl	цц	цШ	цƐ	

Eri zhi [examples]

NDAKO = IƐ, Ɛ, I, Il, IП

Etun **ц**ʁ [exercise 28]

I. E G I Z H I _____

Ц. Z A W A N G I _____

Ш. A L I T A _____

Ɛ. A J E L I _____

П. C I N C I N _____

Ə. S A R A U T A _____

Г. C I N W A N _____

ʁ. W A N C I N _____

ρ. L A Z I N _____

IӨ. L O Z U N _____

Шρ

Egimikazhi be Egizhi tswa e [Letters and numbers formation]

Aa	Bb	Cc	Dd	Ee
I	ц	Ш	Ɛ	П
Ff	Gg	Hh	Ii	Jj
Ə	Г	ʁ	ρ	IΘ
Kk	Ll	Mm	Nn	Oo
Il	Iц	IШ	IƐ	IП
Pp	Rr	Ss	Tt	Uu
IƏ	IГ	Iʁ	Iρ	цΘ
Vv	Ww	Yy	Zz	
цl	цц	цШ	цƐ	

Eri zhi [examples]

NDAKO = IƐ, Ɛ, I, Il, IП

Etun **цρ** [exercise 29]

I. D Z U K O _____

Ц. Z A B O L U G W A _____

Ш. A S I B I T I B I D A _____

Ɛ. K A T A Z H I T S U _____

П. C I N C I N R A Y I _____

Ə. S A R A U T A Y E _____

Г. C I N W A N C I _____

ʁ. W A N C I N Z H I _____

ρ. L A Z I N B E Y I G I _____

IΘ. L O Z U N B E S A D _____

Egimikazhi be Egizhi tswa e [Letters and numbers formation]

Aa	Bb	Cc	Dd	Ee
I	ц	Ш	Ɛ	П
Ff	Gg	Hh	Ii	Jj
Ə	Г	ɤ	ρ	IӨ
Kk	Ll	Mm	Nn	Oo
Il	Iц	IШ	IƐ	IП
Pp	Rr	Ss	Tt	Uu
IƏ	IГ	Iɤ	Iρ	цӨ
Vv	Ww	Yy	Zz	
цl	цц	цШ	цƐ	

Eri zhi [examples]

M + A + N + A + R + A + K + I + S = IШ + I + IƐ + I + IГ + I + Il + ρ + Iɤ = ɤП

Etun **ШӨ** [exercise 30]

I. D Z U K O _____ = _____

Ц. Z A B O L U G W A _____ = _____

Ш. A S I B I T I B I D A _____ = _____

Ɛ. K A T A Z H I T S U _____ = _____

П. C I N C I N R A Y I _____ = _____

Ə. S A R A U T A Y E _____ = _____

Г. C I N W A N C I _____ = _____

ɤ. W A N C I N Z H I _____ = _____

ρ. L A Z I N B E Y I G I _____ = _____

IӨ. L O Z U N B E S A D _____ = _____

Egimikazhi be Egizhi tswa e [letters and numbers formation]

Aa	Bb	Cc	Dd	Ee
I	ц	Ш	Ɛ	П
Ff	Gg	Hh	Ii	Jj
Ə	Г	ɤ	ρ	IΘ
Kk	Ll	Mm	Nn	Oo
II	Iц	IШ	IƐ	IП
Pp	Rr	Ss	Tt	Uu
IƏ	IГ	Iɤ	Iρ	цΘ
Vv	Ww	Yy	Zz	
цI	цц	цШ	цƐ	

Eri zhi [examples]

N×D×A×K×O = IƐ,× Ɛ, × I,×II,×IП = ρ Ц Ɛ Θ

Etun **ШI** [exercise 31]

I. E G I Z H I _____

Ц. Z A W A N G I _____

Ш. A L I T A _____

Ɛ. A J E L I _____

П. C I N C I N _____

Ə. S A R A U T A _____

Г. C I N W A N _____

ɤ. W A N C I N _____

ρ. L A Z I N _____

IΘ. L O Z U N _____

Egimikazhi be Egizhi tswa e [letters and numbers formation]

Aa	Bb	Cc	Dd	Ee
I	ц	Ш	Ɛ	П
Ff	Gg	Hh	Ii	Jj
Ə	Г	ʁ	ρ	IӨ
Kk	Ll	Mm	Nn	Oo
II	Iц	IШ	IƐ	IП
Pp	Rr	Ss	Tt	Uu
IƏ	IГ	Iʁ	Iρ	цӨ
Vv	Ww	Yy	Zz	
цI	цц	цШ	цƐ	

Eri zhi [examples]

Ц, ρ, Ɛ, I = B I D A MUKADDAMI = IШ, Цө, II, I, Ɛ, Ɛ, I, IШ, ρ

Etun **Шц** [exercise 32]

I.	IШ, ρ, IƐ, IƐ, I	I.	E T S U N U P E =
Ц.	Ц, ρ, Ɛ, I	Ц.	E T S U G A I E =
Ш.	I, Г, I, ρ, П	Ш.	E T S U L A P A I =
Ɛ.	II, I, Iρ, Ш, ʁ, I	Ɛ.	E T S U P A T I G I =
П.	Ц, I, Ɛ, П, Г, ρ	П.	E T S U L A F I Y A G I =
Ə.	Iц, I, цI, цӨ, IƐ	Ə.	E T S U T S O N G A =
Г.	Г, П, I, II, IП	Г.	E T S U T S A R A G I =
ʁ.	IШ, Iц, II, цц, I	ʁ.	E T S U S H A R E =
ρ.	Iц, IП, II, цц, I	ρ.	E T S U E G A =
IӨ.	Iц, I, IƏ, I, ρ	IӨ.	E T S U M I N N A =

Egimikazhi be Egizhi tswa e [letters and numbers formation]

Aa	Bb	Cc	Dd	Ee
I	ц	Ш	Ɛ	П
Ff	Gg	Hh	Ii	Jj
Ə	Г	ʁ	ρ	IΘ
Kk	Ll	Mm	Nn	Oo
II	Iц	IШ	IƐ	IП
Pp	Rr	Ss	Tt	Uu
IƏ	IГ	Iʁ	Iρ	цΘ
Vv	Ww	Yy	Zz	
цI	цц	цШ	цƐ	

Eri zhi [examples]

Ц, ρ, Ɛ, I+ I, ц, Ш = B I D A + A, B, C MUKADDAMI = IШ, Цө, II, I, Ɛ, Ɛ, I, IШ, ρ

Etun **ШШ** [exercise 33]

I.	IШ, ρ, IƐ, IƐ, I , + I ,ц, Ш	I.	E T S U N U P E + Z, H, I =
Ц.	Ц, ρ, Ɛ, I + I, ц, Ш	Ц.	E T S U G A I E + Z, H, I =
Ш.	I, Г, I, ρ, П + I, ц, Ш	Ш.	E T S U L A P A I + Z, H, I =
Ɛ.	II, I, Iρ, Ш, ʁ, I + I, ц, Ш	Ɛ.	E T S U P A T I G I + Z, H, I =
П.	Ц, I, Ɛ, П, Г, ρ + I, ц, Ш	П.	E T S U LAFIYAGI+ Z, H, I =
Ə.	Iц, I, цI, цΘ, IƐ + I, ц, Ш	Ə.	E T S U TSONGA+ Z, H, I =
Г.	Г, П, I, II, IП+ I, ц, Ш	Г.	E T S U TSARAGI + Z, H, I =
ʁ.	IШ, Iц, II, цц, I + I, ц, Ш	ʁ.	E T S U S H A R E + Z, H, I =
ρ.	Iц, IП, II, цц, I + I, ц, Ш	ρ.	E T S U E G A + Z, H, I =
IΘ.	Iц, I, IƏ, I, ρ+ I, ц, Ш	IΘ.	E T S U M I N N A+ Z, H, I =

Ezo egan nya enya lakeba

[Word problem on addition]

Eri [example]

Adnan de wogi guni, Amina de wogi guba. Wogi gukin a de zagubaba o?

Wogi gutswanyi.

Etun **Ш**ɛ [exercise 34]

I. Rakiya de fere eshi, Ahmadu de fere gutsun, Aisha de fere guta. Fere gukin ade kpata o?

Ц. Zaguba de ewo nera guwo, za guni de ewo nera eshi. Wokin a de kpata o?

Ш. Khadijat de nera arata fobaci fo e, wunde nera gutota fotaci fo e. Wokin yi kpata o?

Ɛ. Mini gbako gokati nini o, Binta kun yikan efo guba. Foeni, wunde panrata, efo ebaci wunde nera shitsun. Wokin wunde enya kun efo gubaba o?

П. Enya gwegi ala wan be enya shini. Gukin wan ya wo e nya o?

Ə. Kashi de fere shiba, Ahmadu de fere gutsun, Aisha de fere guta. Fere gukin a de kpata o?

Г. Nnadi de ewo nera gbanwo, za guni de ewo nera eshi. Wokin a de kpata o?

ƀ. Khadijat de nera shitsun Fobaci fo e, wunde nera gutota fotaci fo e. Wokin yi kpata o?

ρ. Mini gbako gokati nini o, Binta kun yikan efo guba. Foeni, wunde near gba, efo ebaci wunde nera shitsun. Wokin wunde enya kun efo gubaba o?

IӨ. Enya shita ala wan be enya shini. Gukin wan ya wo nya o?

II. Mini gbako gokati nini o, Gana kun ebi efo guta. Foeni, wunde panrata, efo ebaci wunde nera shitsun, efo etaci wunde nera adwani. Wokin wunde enya kun efo gubaba o?

Iц. Mini gbako gokati nini o, Nnawo kun guzha efo guni. Foeni, wunde panshi, efo ebaci wunde nera shitsun, efo etaci wunde nera adwani, efo enici wunde pangwegi. Wokin wunde enya kun efo gubaba o?

Ezo egan nya enya lakeba

[word problem on addition]

Eri [example]

Hannatu de ewo guni, Amina de ewo guba. Ewo gukin a de zagubaba o?

Ewo gutswanyi.

Etun **Ш**ɛ [exercise 34]

I. Adamu de giyeko eshi be guni, Alfa de giyeko gutsun, Nnakuli de giyeko gutota. Giyeko gukin a de kpata o?

Ц. Za guta de ewo nera guwo, za guni de ewo nera eshi. Wokin a de kpata o?

Ш. Khadijat de nera arata be gutsu e fobaci fo e, wunde nera gutota fotaci fo e. Wokin wunde kpata o?

Ɛ. Mini gbako gokati nini o, Rufyan kun kuli efo guta. Foeni, wunde panrata, efo ebaci wunde nera shitsun, efo etaci wunde nera guwo. Wokin wunde enya kun efo gutata o?

П. Enya gwegi be guni ala wan be enya shini. Gukin wan ya wo nyao?

Ə. Tetengi de yisangi shiba, Ahmadu de yisangi gutsun be gutwani, Aisha de yisangi gwegi be guta e. Yisangi gukin a de kpata o?

Г. Shetu de ewo nera gbanwo, za gutsun de ewo nera eshi. Wokin a de kpata o?

ƪ. Khadijat de nera shitsun be guba e fonici, wunde nera gutota fotsunci. Wokin yi kpata o?

ρ. Mini gbako gokati nini o, Nnashibi kun yikan efo guba. Foeni, wunde ewo gba, efo ebaci wunde ewo kpautsun. Wokin wunde enya kun efo gubaba o?

IӨ. Enya shita ala wan be enya kpako. Gukin wan ya wo nya o?

II. Mini gbako gokati nini o, Tswanya kun ebi efo guta. Foeni, wunde near kpauba be shitsun, efo ebaci wunde gba eda guwo, efo etaci wunde gbarata. Wokin wunde enya kun efo gubaba o?

Iц. Mini gbako gokati nini o, Nnawo kun guzha efo gunni. Foeni, wunde panshi, efo ebaci wunde nera shitsun, efo etaci wunde nera adwani, efo enici wunde pangwegi. Wokin wunde enya kun efo gubaba o?

Ezo egan nya enya lakeba

[word problem on addition]

Eri [example] A daka Шц labe daka Г. Daka Шр.

Etun **ШП** [exercise 35]

I. Kiyi enya lakeba ПП be Шц

Ц. Wa lila keba ekpakana ƏГ be ƏГ za?

Ш. Kiwa lakeba zugutsun cya ya wo e IцП

Є. La ЄПƏ keba be ПцШ.

П. Egi de #П eda eshi. Wokin a de keba o?

Ə. Mungoro цӨ be lemu ШӨ. Gukin wan ya wo e nya o?

Г. Egi ƏП dan kpikpeba Ац o, egi цʁ dan kpikpeba Вц, wa ezhe egi kpikpeba gubaba zhi za?

ʁ. Eza IӨӨ fi Bida o, eza ПӨӨ zhi fi Gaye o, ahbe eza цПӨ fi Kutigi o. Eza gukin fi ezhi gutata bo?

Р. Doko цӨЄ fi zhini bo, Doko цƏШ fi cikan o. Doko gukin fi zhini be cikan nya o?

IӨ. ЄцӨ be ПƏГ zugutsun. Gukin wan ya wo e nya o?

II. ʁpIӨ, IIIц, IШIЄ, abe IПIƏ. Gukin wan ya wo e nya o?

Iц. Egi ПƏП dan kpikpeba Ац o, egi цʁП dan kpikpeba Вц o, wa ezhe egi kpikpeba gubaba zhi za?

IШ. Eza IПӨӨ fi Bida o, eza ППӨӨ zhi fi Gaye o, ahbe eza цППӨ fi Kutigi o. Eza gukin fi ezhi gutata bo?

Ezo egan nya enya lakeba [word problem on addition]

Eri [example]

A daka Шц labe daka Г. Daka Шр.

Etun **ШӘ** [exercise 36]

I. Kiyi enya lakeba ППꙅ be Шц

Ц. Wa lila keba ekpakana ӘꙅГ be ӘГꙅ za?

Ш. Kiwa lakeba zugutsun cya ya wo e IӨӨӨ

Є. La ЄПӘӨ keba be ПцШӨ.

П. Egi de #ПӨ eda eshi. Wokin a de keba o?

Ә. Mungoro цӨӨ be lemu ШӨӨ. Gukin wan ya wo e nya o?

Г. Egi ӘПӨ dan kpikpeba Ац o, egi цꙅӨ dan kpikpeba Вц o, wa ezhe egi kpikpeba gubaba zhi za?

ꙅ. Eza IӨ,ӨӨӨ fi Bida o, eza П,ӨӨӨ zhi fi Gaye o, ahbe eza ц,ПӨӨ fi Kutigi o. Eza gukin fi ezhi gutata bo?

Р. Doko ц,ӨЄӨ fi zhini bo, Doko ц,ӨӘШ fi cikan o. Doko gukin fi zhini be cikan nyo?

IӨ. Є,ӨцӨ be П,ӨӘГ zugutsun. Gukin wan ya wo e nya o?

II. ꙅр,IӨӨ, II,IцӨ, IШ,IЄӨ, ahbe IП,IӘӨ. Gukin wan ya wo e nya o?

Iц. Egi П,ӘПӨ dan kpikprba Ац o, egi ц,ꙅПӨ dan kpikpeba Вц o, wa eze egi kpikpeba gubaba zhi za?

IШ. Eza IП,ӨӨӨ fi Bida o, eza ПП,ӨӨӨ zhi fi Gaye o, abe eza цППӨ fi Kutigi o. Eza gukin fi ezhi gutata bo?

Ezo egan nya enya like [word problem on subtraction]

Eri [example]

A enya Iρ like mini Ɛρ. Wade ШӨ

Etun **ШГ** [exercise 37]

I. Li ʁП ke mini IӨӨ.

Ц. Gukin wa wa ПӨ mini IӨӨ bo?

Ш. Katsan de lemu цр, wunci mu IГ. Gukin wande ke o?

Ɛ. Madu de kara цʁ, wunci gi ШЄ. Kara gukin wan deke o?

П. Egi цГ fi kpikpeba o. цI yi nyizagi. Za gukin yi bagi o?

Ə. Gukin yi mini ƏГ be ПЄ nya o?

Г. Mokwa de eza IӨӨӨ, Enagi de eza sunsun ПӨӨ. Za gukin Mokwa a dokun gan eza sunsun Enagi o?

ʁ. Za guba lo lati, zeni nunu цГӨ, za baci nunu IƏӨ. Gukin a nunu gandozhi o?

ρ. Nnakuli lo dzuko be ewo ρӨ, wunshi ebi nya ρӨ. Wokin wan deke o?

IӨ. Jekafa wan malo dzuko asibi o eti ППӨ. Manarakis de yegun zawangi zhi wunci e kun nyaba u eti ШПӨ. Wokin wan zun ya o?

II. Za guba lo lati, zeni nunu цГӨ, za baci nunu IƏӨ. Gukin a nunu gandozhi o?

Iц. Nnakuli lo dzuko be ewo ρӨ, wunshi ebi nya ρӨ. Wokin wan deke o?

IШ. Gari a malo dzuko fotwaba o eti ШПӨ. Manarakis de yegun eza egwa gbagi zhi wunci e kun nyaba u eti ццӨ . Wokin wen zun ya o?

IЄ. Gukin yi mini ƏГӨ be ПЄӨ nya o?

IП. Mokwa de eza IӨ,ӨӨӨ, Enagi de eza sunsun П,ӨӨӨ. Za gukin Mokwa dokun gan eza sunsun Enagi o?

Ezo egan nya enya like

[word problem on subtraction]

Eri [example] Ahmadu li Kuli IӨӨ ke mini ЦӨӨ. Wade IӨӨ

Etun **ƐӨ** [exercise 40]

I. Li ȣ,IӨӨ ke mini IӨ,ӨӨӨ.

Ц. Gukin wa wa П,ӨӨӨ mini II,ӨӨӨ bo?

Ш. Katsan de lemu ц,ρӨӨ, wunci mu I,ГӨӨ. Gukin wande ke o?

Ɛ. Madu de kara ц,ȣӨӨ, wunci gi Ш,ƐӨӨ. Kara gukin wan deke o?

П. Egi ц,ГӨӨ fi kpikpeba o. ц,IӨӨ yi nyizagi. Za gukin yi bagi o?

Ə. Gukin yi mini Ə,ГӨӨ be П,ƐӨӨ nya o?

Г. Mokwa de eza IӨӨ,ӨӨӨ, Enagi de eza sunsun ПӨ,ӨӨӨ. Za gukin Mokwa dokun gan eza sunsun Enagi o?

ȣ. Za guba lo lati, zeni nunu цГ,ӨӨӨ, za baci nunu IƏ,ӨӨӨ. Gukin a nunu gandozhi o?

ρ. Nnakuli lo dzuko be ewo ρӨӨӨ, wun shi ebi nya ρӨӨӨ. Wokin wan deke o?

IӨ. Jekafa wan malo dzuko foguntsunci o eti ППӨӨӨ. Manarakis de yegun zawangi zhi, wunci e kun nyaba u eti ШПӨӨӨ. Wokin wen zun ya o?

II. Za guba lo lati, zeni nunu цГ,ӨӨӨ, za baci nunu IƏӨ. Gukin a nunu gandozhi o?

Iц. Nnakuli lo dzuko be ewo ρI,ӨӨӨ, wun shi ebi nya ρ,ӨӨӨ. Wokin wan deke o?

IШ. Gari wan malo dzuko fotaci e eti ШПI,ӨӨӨ. Manarakis de yegun eza egwa gbagi zhi wunci e kun nyaba u eti цц,ӨӨӨ. Wokin wen zun ya o?

IƐ. Gukin yi mini ƏГIӨӨӨ be ПƐӨӨӨ nya o?

IП. Mokwa de eza I,ӨӨӨӨӨ, Enagi de eza sunsun ПӨӨ,ӨӨӨ. Za gukin Mokwa dokun gan eza sunsun Enagi o?

Ezo egan nya enya lakeba be lilike e

[word problem on addition and subtraction]

Eri [example] A daka Шц like mini daka ГЦ. Daka ƐӨ

Etun **ƐI** [exercise 41]

I. Kiyi enya lakeba ППʁ be Шц aci li IӨӨ ke o?

Ц. Wa lila keba ekpakana ӘʁГ be ӘГʁ za, woci o li IӨӨ ke o?

Ш. Kiwa lakeba zugutsun cya ya wo e IӨӨӨ. Li IӨ ke mini u bo.

Ɛ. La ƐПӘӨ keba be ПцШӨ, woci o li IӨӨ o ke.

П. Egi de #ПӨ eda eshi. Wokin a de keba o? Woci o li IӨӨ o ke.

Ә. Mungoro цӨӨ be lemu ШӨӨ. Gukin wan ya wo e nya o? Woci o li IӨӨ o ke.

Г. Egi ӘПӨ dan kpikpeba ц o, egi цʁӨ dan kpikpeba Ɛ o, wa ezhe egi kpikpeba gubaba nana zhi za? Woci o li eza IӨӨ o ke.

ʁ. Eza IӨ,ӨӨӨ fi Bida o, eza П,ӨӨӨ zhi fi Gaye o, ahbe eza ц,ПӨӨ fi Kutigi o. Eza gukin fi ezhi gutata bo? Woci o li IӨӨӨ o ke.

Р. Doko ц,ӨƐӨ fi zhini bo, Doko ц,ӨӘШ fi cikan o. Doko gukin fi zhini be cikan nya o?

IӨ. Ɛ,ӨцӨ be П,ӨӘГ zugutsun. Gukin wan ya wo e nya o?

II. ʁр,IӨӨ, II,IцӨ, IШ,IƐӨ, abe IП,IӘӨ. Gukin wan ya wo e nya o?

Iц. Egi П,ӘПӨ dan kpikpeba ц o, egi ц,ʁПӨ dan kpikpeba Ɛ o, wa eze egi kpikpeba gubaba zhi za?

IШ. Eza IП,ӨӨӨ fi Bida o, eza ПП,ӨӨӨ zhi fi Gaye o, ahbe eza цППӨ fi Kutigi o. Eza gukin fi ezhi gutata bo?

Egwatugi Eda [multiplication table]

Eda I	**Eda ц**	**Eda Ш**	Eda **Ɛ**
I × I = I	Ц × I = Ц	Ш × I = Ш	Ɛ × I = Ɛ
I × ц = ц	Ц × Ц = Ɛ	Ш × ц = Ə	Ɛ × ц = ʁ
I × Ш = Ш	Ц × Ш = Ə	Ш × Ш = ρ	Ɛ × Ш = Iц
I × Ɛ = Ɛ	Ц × Ɛ = ʁ	Ш × Ɛ = Iц	Ɛ × Ɛ = IƏ
I × П = П	Ц × П = IӨ	Ш × П = IП	Ɛ × П = цӨ
I × Ə = Ə	Ц × Ə = Iц	Ш × Ə = Iʁ	Ɛ × Ə = цЄ
I × Г = Г	Ц × Г = IЄ	Ш × Г = цI	Ɛ × Г = цʁ
I × ʁ = ʁ	Ц × ʁ = IƏ	Ш × ʁ = цЄ	Ɛ × ʁ = Шц
I × ρ = ρ	Ц × ρ = Iʁ	Ш × ρ = цГ	Ɛ × ρ = ШƏ
I × IӨ = IӨ	Ц × IӨ = цӨ	Ш × IӨ = ШӨ	Ɛ × IӨ = ƐӨ
I × II = II	Ц × II = цц	Ш × II = ШШ	Ɛ × II = ЄЄ
I × Iц = Iц	Ц × Iц = цЄ	Ш × Iц = ШƏ	Ɛ × Iц = Єʁ

Eri [example]

Dangi IӨ de [IӨ] × [ц] =Eye [цӨ]

Etun **Ɛц** [exercise 42]

I. Shigi П de [ ] × [ ] = Bici [ ]

ц. Bagi Ɛ de [ ] × [ ] = Egwa [ ]

Ш. Nanko ρ de [ ] × [ ] = Tukpa [ ]

Ɛ. Ndako ʁ de [ ] × [ ] = Eye [ ]

П. Bishe IӨ de [ ] × [ ] = Bici [ ]

Ə. Nangi Iρ de [ ] × [ ] = Tukpa [ ]

Г. Nanko Iʁ de [ ] × [ ] = Eye [ ]

ʁ. Elugi IIӨ de [ ] × [ ] = Bici [ ]

ρ. Rakun IП [ ] × [ ] = Bici [ ]

IӨ. Dagba ƐI [ ] × [ ] = Egwa [ ]

Пц

Egwatugi Eda [multiplication table]

Eda	Eda	Eda	Eda
П × I = П	Ə × I = Ə	Г × I = Г	ʁ × I = ʁ
П × ц = IӨ	Ə × ц = Iц	Г × ц = IƐ	ʁ × ц = IƏ
П × Ш = IП	Ə × Ш = Iʁ	Г × Ш = цI	ʁ × Ш = цƐ
П × Ɛ = цӨ	Ə × Ɛ = цƐ	Г × Ɛ = цʁ	ʁ × Ɛ = Шц
П × П = цП	Ə × П = ШӨ	Г × П = ШП	ʁ × П = ƐӨ
П × Ə = ШӨ	Ə × Ə = ШƏ	Г × Ə = Ɛц	ʁ × Ə = Ɛʁ
П × Г = ШП	Ə × Г = Ɛц	Г × Г = Ɛρ	ʁ × Г = ПƏ
П × ʁ = ƐӨ	Ə × ʁ = Ɛʁ	Г × ʁ = ПƏ	ʁ × ʁ = ƏƐ
П × ρ = ЄП	Ə × ρ = ПЄ	Г × ρ = ƏШ	ʁ × ρ = Гц
П × IӨ = ПӨ	Ə × IӨ = ƏӨ	Г × IӨ = ГӨ	ʁ × IӨ = ʁӨ
П × II = ПП	Ə × II = ƏƏ	Г × II = ГГ	ʁ × II = ʁʁ
П × Iц = ƏӨ	Ə × Iц = Гц	Г × Iц = ʁƐ	ʁ × Iц = ρƏ

Eri [example]

Dangi IӨ de [IӨ] × [ц] =Eye [цӨ]

Etun **ƐШ** [exercise 43]

I. Shigi Пц [ ] × [ ] = Bici [ ]

ц. Bagi Ɛц de [ ] × [ ] = Egwa [ ]

Ш. Nnako ρц [ ] × [ ] = Tukpa [ ]

Ɛ. Ndako ʁц [ ] × [ ] = Eye [ ]

П. Bishe IцӨ [ ] × [ ] = Bici [ ]

Ə. Nangi Iцρ [ ] × [ ] = Tukpa [ ]

Г. Nanko Iцʁ [ ] × [ ] = Eye [ ]

ʁ. Elugi IIц [ ] × [ ] = Bici [ ]

ρ. Rakun IПц [ ] × [ ] = Bici [ ]

IӨ. Dagba ƐIц [ ] × [ ] = Egwa [ ]

Egwatugi Eda [multiplication table]

Eda	Eda	Eda	Eda
ρ × I = ρ	IΘ × I = IΘ	II × I = II	Iц × I = Iц
ρ × ц = Iʁ	IΘ × ц = цΘ	II × ц = цц	Iц × ц = цƐ
ρ × Ш = цГ	IΘ × Ш = ШΘ	II × Ш = ШШ	Iц × Ш = ШƏ
ρ × Ɛ = ШƏ	IΘ × Ɛ = ƐΘ	II × Ɛ = ƐƐ	Iц × Ɛ = Ɛʁ
ρ × П = ƐП	IΘ × П = ПΘ	II × П = ПП	Iц × П = ƏΘ
ρ × Ə = ПƐ	IΘ × Ə = ƏΘ	II × Ə = ƏƏ	Iц × Ə = Гц
ρ × Г = ƏШ	IΘ × Г = ГΘ	II × Г = ГГ	Iц × Г = ʁƐ
ρ × ʁ = Гц	IΘ × ʁ = ʁΘ	II × ʁ = ʁʁ	Iц × ʁ = ρƏ
ρ × ρ = ʁI	IΘ × ρ = ρΘ	II × ρ = ρρ	Iц × ρ = IΘʁ
ρ × IΘ = ρΘ	IΘ × IΘ = IΘΘ	II × IΘ = IIΘ	Iц × IΘ = IцΘ
ρ × II = ρρ	IΘ × II = IIΘ	II × II = Iцl	Iц × II = IШц
ρ × Iц =IΘʁ	IΘ × Iц = IцΘ	II × Iц = IШц	Iц × Iц = IƐƐ

Eri [example]

Dangi IΘ de [IΘ] × [ц] =Eye [цΘ]

Etun **ƐƐ** [exercise 44]

I. Shigi ПП [ ] × [ ] = Bici [ ]

ц. Bagi ƐП de [ ] × [ ] = Egwa [ ]

Ш. Nnako Пρ [ ] × [ ] = Tukpa [ ]

Ɛ. Ndako Пʁ [ ] × [ ] = Eye [ ]

П. Bishe ПIΘ [ ] × [ ] = Bici [ ]

Ə. Nangi IρП [ ] × [ ] = Tukpa [ ]

Г. Nanko IʁП [ ] × [ ] = Eye [ ]

ʁ. Elugi IПIΘ [ ] × [ ] = Bici [ ]

ρ. Rakun IПП [ ] × [ ] = Bici [ ]

IΘ. Dagba ƐIП [ ] × [ ] = Egwa [ ]

Eda [multiplication]

І	ц	Ш	Ɛ	П	Ə	Г	ʁ	ρ	ІӨ
1	2	3	4	5	6	7	8	9	10
ІІ	Іц	ІШ	ІƐ	ІП	ІƏ	ІГ	Іʁ	Іρ	цӨ
11	12	13	14	15	16	17	18	19	20

Eri zhi [examples]

І. І × ц = ц

Ц. Ц × Ш = Ə

Ш. Ш × П = ІП

Etun **Ɛ**П A [exercise 45]

І. П × Г =

Ц. Г × Ə =

Ш. Ə × ρ =

Ɛ. ʁ × ρ =

П. ʁ × ІӨ =

Ə. Ц × Ш =

Г. І × Ц =

ʁ. П × Ш =

ρ. Г × П =

ІӨ. Ə × Г =

Etun **Ɛ**П B [exercise 45]

І. П × Г =

Ц. П × Ə =

Ш. Ə × П =

Ɛ. П × ρ =

П. ʁ × ІӨ =

Ə. Ц × П =

Г. П × Ц =

ʁ. П × П =

ρ. Г × П =

ІӨ. П × Г =

Eda [multiplication]

I	ц	Ш	Ɛ	П	Ə	Г	ʁ	ρ	IӨ
1	2	3	4	5	6	7	8	9	10
II	Iц	IШ	IƐ	IП	IƏ	IГ	Iʁ	Iρ	цӨ
11	12	13	14	15	16	17	18	19	20

Eri zhi [examples]

I. I × ц × Ш = Ə

Ц. Ц × Ш × Ɛ = ЦƐ

Ш. Ш × П × ʁ = IцӨ

Etun **ɛ**ə A [exercise 46]

I. П × Г × I =

Ц. Г × Ə × Ц =

Ш. Ə × ρ × Ш =

Ɛ. ʁ × ρ × Ɛ =

П. ʁ × IӨ × П =

Ə. Ц × Ш × IӨ =

Г. I × Ц × ρ =

ʁ. П × Ш × ʁ =

ρ. Г × П × Г =

IӨ. Ə × Г × Ə =

Etun **ɛ**ə B [exercise 46]

I. П × Г × ʁ =

Ц. Г × ʁ × Ц =

Ш. Ə × ʁ × Ш =

Ɛ. ʁ × ʁ × Ɛ =

П. ʁ × IӨ × ʁ =

Ə. Ц × Ш × ʁ =

Г. I × ʁ × ρ =

ʁ. ʁ × Ш × ʁ =

ρ. Г × ʁ × Г =

IӨ. ʁ × Г × Ə =

Eda [multiplication]

Eri zhi [examples]

I.	I	ц	ц.	ʁ	ρ	Ш.	I	
	×	Ш		×	Ө			×ρ
	Ш	Ə		Ө	Ө			ρ

Etun **ɛ**Г [exercise 47]

I.	I	Ш	ц.	ʁ	ρ	Ш.	IƏ	
	×	Ш		×	ɛ			×Ə
ɛ.	ц	Ш	П.	ρ	ρ	Ə.	ШƏ	
	×	ɛ		×	ɛ			× П
Г.	ɛ	ɛ	ʁ.	ɛ	ρ	ρ.	IƏ	
	×	Ш		×	ɛ			× ʁ
I Ө.	I	Ш	I I.	ʁ	Ө	I ц.	ӨƏ	
	×	Ө		×	ɛ			× Ə
I Ш.	I	Ш	I ɛ.	ʁ	ρ	I П.	IП	
	×	ρ		×	Ə			× Ə

Eda [multiplication]

Eri zhi [examples]

І.	І	ц	ц.	ȣ	ρ	Ш.	І	
	×	Ш		×	Θ		×ρ	
	Ш	Ə		Θ	Θ		ρ	

Etun **Ɛ**ȣ [exercise 48]

І.	І	Ш	ц.	ȣ	ρ	Ш.	ІƏ	
	× Ɛ	Ш		× Ɛ	Ɛ		× Ə	
Ɛ.	ц	Ш	П.	ρ	ρ	Ə.	ШƏ	
	×Ə	Ɛ		×Ə	Ɛ		× П	
Г.	Ɛ	Ɛ	ȣ.	Ɛ	ρ	ρ.	ІƏ	
	×Ə	Ш		×Ə	Ɛ		×ȣƏ	
І Θ.	І	Ш	І І.	ȣ	Θ	І ц.	ΘƏ	
	× Ə	Θ		×Ə	Ɛ		×ƏƏ	
І Ш.	І	Ш	І Ɛ.	ȣ	ρ	І П.	ІП	
	×Ə	ρ		×Ə	Ə		×ƏƏ	

Eda [multiplication]

Eri zhi [examples]

I.	I	ц		ц.	ʁ	ρ		Ш.	I	
	×	Ш			×	Θ			×ρ	
	Ш	Ə			Θ	Θ			ρ	

Etun **ɛ**ρ [exercise 49]

I.	ρ	ц	Ш	ц.	ʁ	ρ	ʁ	Ш.	Iρ	
	×	Ш	ρ		×	ρ	ρ		× ρ	
Ɛ.	I	ц	ʁ	П.	ʁ	ρ	ʁ	Ə.	Iʁ	
	×	ц	Ш		×	ʁ	ρ		× ʁ	
Г.	I	Ɛ	Ш	ʁ.	ʁ	ρ	Ɛ	ρ.	Ɛ	
	×	Ш	Ɛ		×	Ɛ	ρ		× ρ	
I Θ.	П	П	П	I I.	ʁ	П	ʁ	Iц.	П	
	×	Ш	Ш		×П	ρ	П		× Ə	
IШ.	I	ц	Ш	IƐ.	ʁ	ρ	ʁ	IП.	I	
	×	Ш	Ш		×	Ш	ρ		×ρ	

Eda [multiplication]

Eri zhi [examples]

I.	I	ц		ц.	ʁ	ρ		Ш.	I	
	×	Ш			×	Ө			×ρ	
	Ш	Ə			Ө	Ө			ρ	

Etun ПӨ [exercise 50]

I.	Р	ц	Ш	ц.	ʁ	ρ	ʁ	Ш.	I	
	×	ρ	ʁ		×	ʁ	ʁ		×ʁ	
Є.	I	ц	ʁ	П.	ʁ	ρ	ʁ	Ə.	I	
	×	ρ	ʁ		×	ʁ	ʁ		×ʁ	
Г.	I	Є	Ш	ʁ.	ʁ	ρ	Є	ρ.	Є	
	×	ρ	Є		×	Є	ρ		× ʁ	
I Ө.	П	П	П	I I.	ʁ	П	ʁ	Iц.	П	
	×	ρ	ʁ		× ʁ	ρ	ʁ		× ʁ	
IШ.	I	ц	Ш	IЄ.	ʁ	ρ	ʁ	IП.	I	
	×	ʁ	ʁ		×	ʁ	ʁ		×ʁ	

Ezo egan nya eda

[Word problem on multiplication]

Eri [example] Eda П be Ə = ШӨ

Etun ПӀ [exercise 51]

І. Eda Ə be Г =

Ц. Eda Г be ʁ =

Ш. Eda ʁ be ρ =

Є. Eda ρ be ІӨ =

П. Eda ІӨ be ІІ =

Ə. Eda ІІ be Іц =

Г. Eda Іц be ІШ =

ʁ . Eda ІШ be ІЄ =

ρ. Eda ІЄ be ІП =

ІӨ. Eda ІП be ІƏ =

ІІ. Eda ІƏ be ІГ =

Іц . Eda ІГ be Іʁ =

ІШ. Eda Іʁ be Іρ =

ІЄ. Eda Іρ be цӨ =

ІП. Eda цӨ be цӨ =

ІƏ. Eda цӨ be ШӨ =

ІГ. Eda цӨ be ЄӨ =

Ezo egan nya eda

[word problem on multiplication]

Eri [example] Eda П be Ə be Г = цIӨ

Etun **ПЦ** [exercise 52]

I. Eda Ə be Г be I =

Ц. Eda Г be ɤ be Ц =

Ш. Eda ɤ be ρ be Ш =

Ɛ. Eda ρ be IӨ be Ɛ =

П. Eda IӨ be II be П =

Ə. Eda II be Iц be Ə =

Г. Eda Iц be IШ be Г =

ɤ. Eda IШ be IƐ be ɤ =

ρ. Eda IƐ be IП be ρ =

IӨ. Eda IП be IƏ be IӨ =

II. Eda IƏ be IГ be II =

Iц. Eda IГ be Iɤ be Iц =

IШ. Eda Iɤ be Iρ be IШ =

IƐ. Eda Iρ be цӨ be IƐ =

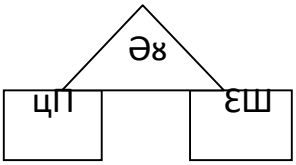
IП. Eda цӨ be цӨ be IП =

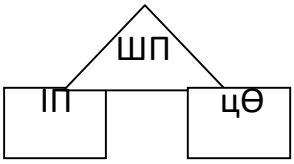
IƏ. Eda цӨ be ШӨ be IƏ =

IГ. Eda цӨ be ƐӨ be IГ =

Ema Yekpa be bibe [quantitative reasoning in sum of]

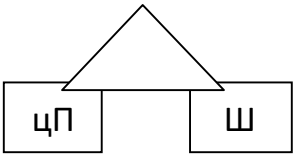
Eri zhi [examples]



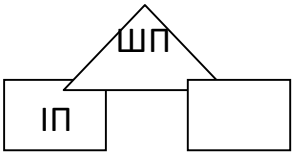


Etun **ПШ** [exercise 53]

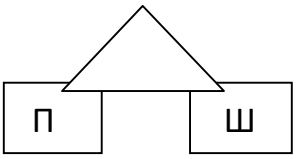
І.



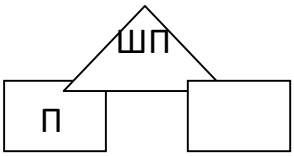
ц.



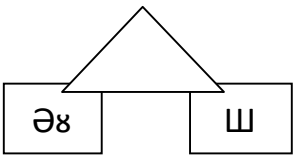
Ш.



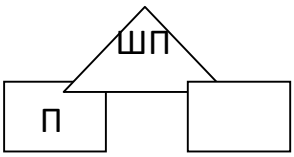
Є.



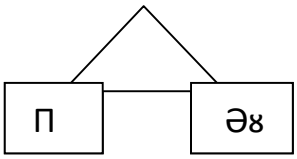
П.



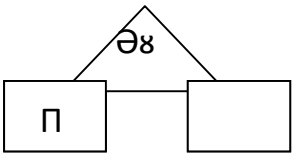
Ə.



Г.



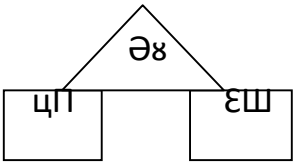
ʁ.

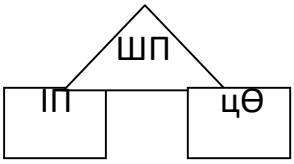


Əш

Ema Yekpa be bibe [quantitative reasoning in sum of]

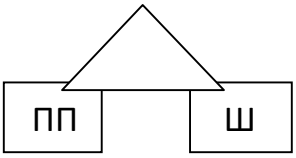
Eri zhi [examples]



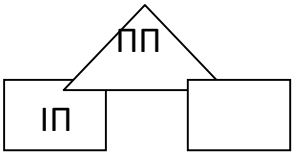


Etun **П**ɛ [exercise 54]

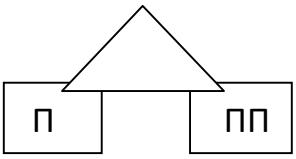
І.



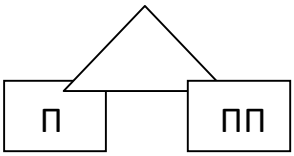
ц.



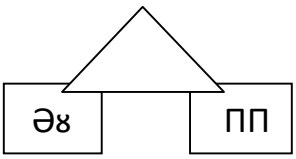
Ш.



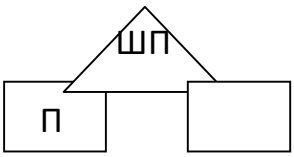
Ɛ.



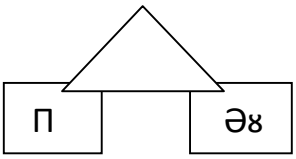
П.



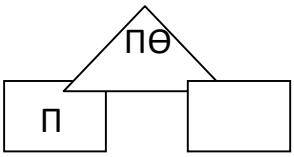
Ə.



Г.



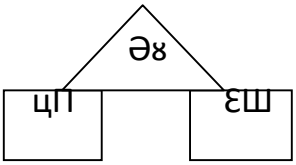
ʁ.

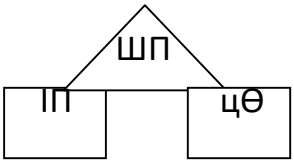


Əɛ

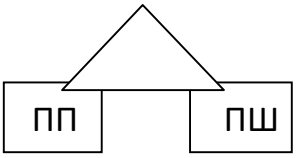
Ema Yekpa kike [quantitative reasoning in difference]

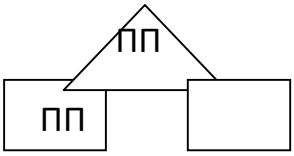
Eri zhi [examples]

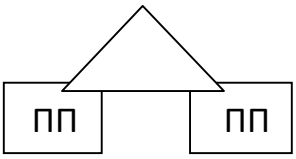


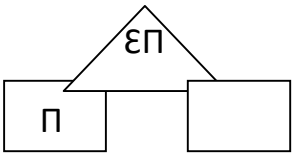


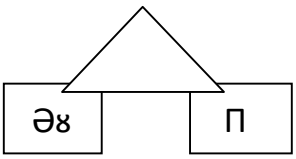
Etun **ПП** [exercise 55]

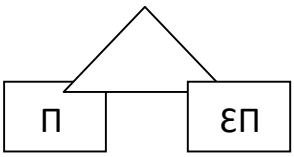
І. 

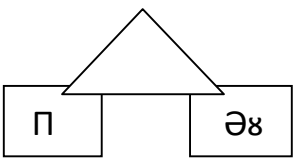
ц. 

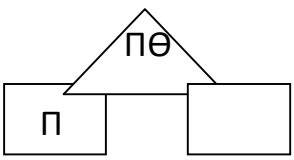
Ш. 

Є. 

П. 

Ə. 

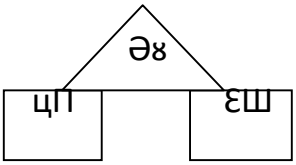
Г. 

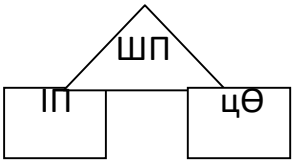
ʁ. 

ƏП

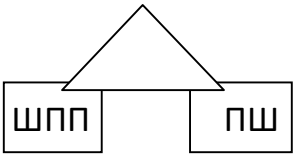
Ema Yekpa kike [quantitative reasoning in difference]

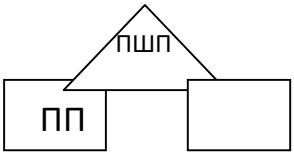
Eri zhi [examples]

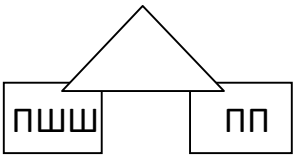


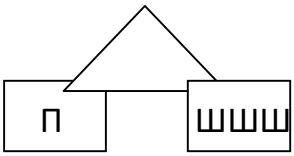


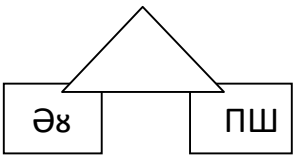
Etun **ПП** [exercise 55]

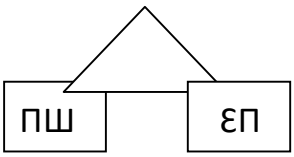
І. 

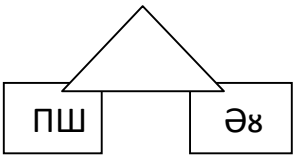
ц. 

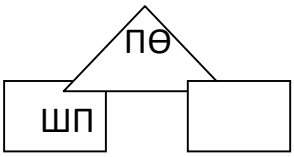
Ш. 

Є. 

П. 

Ә. 

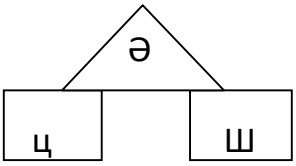
Г. 

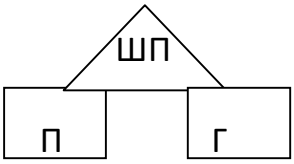
४. 

ӘӘ

Ema Yekpa eda [quantitative reasoning in multiples]

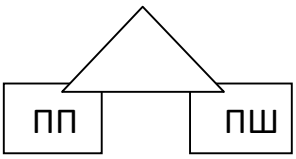
Eri zhi [examples]





Etun **П**Ә [exercise 56]

І.



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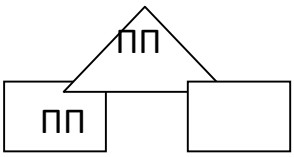

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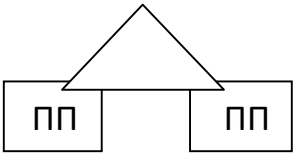
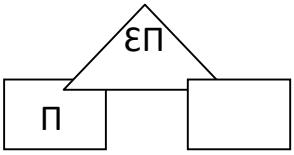
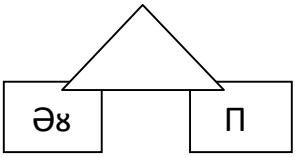


Є.



П.



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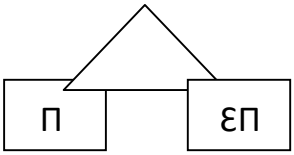
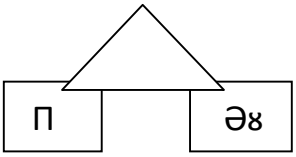


Г.



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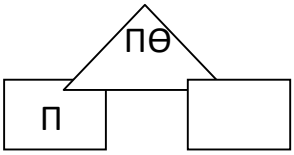
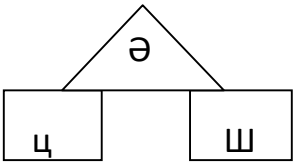
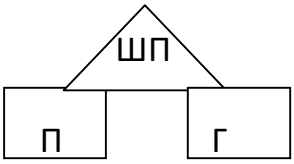


Әг

Ema Yekpa eda [quantitative reasoning in multiples]

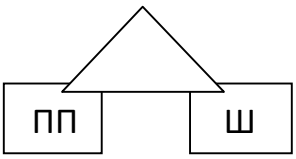
Eri zhi [examples]



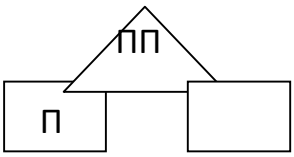


Etun **пг** [exercise 57]

I.



ц.



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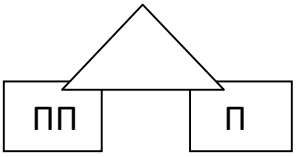
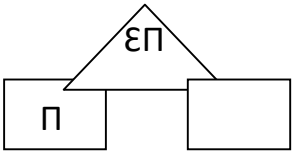
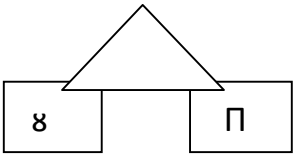


ε.



П.



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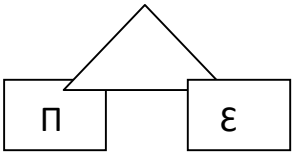
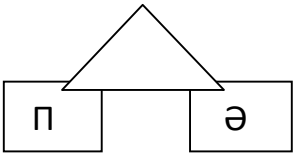
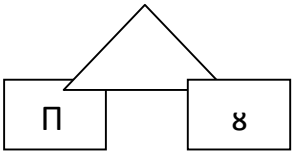


Г.



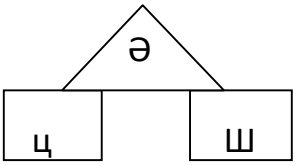
ɤ.

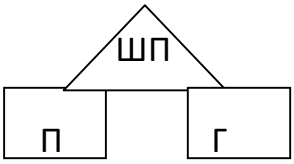


əɤ

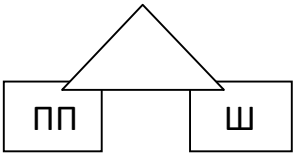
Ema Yekpa enyagan [quantitative reasoning in division]

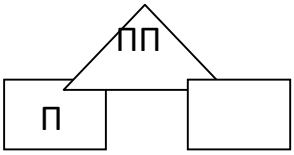
Eri zhi [examples]

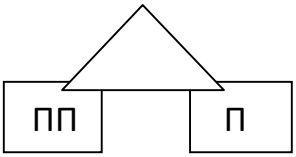


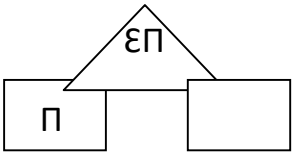


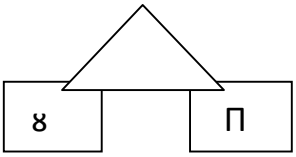
Etun **Пʁ** [exercise 58]

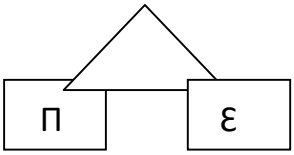
І. 

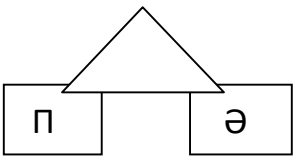
ц. 

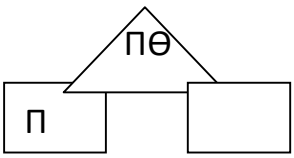
Ш. 

Є. 

П. 

Ə. 

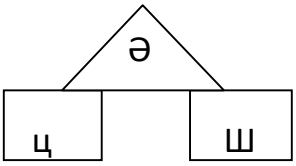
Г. 

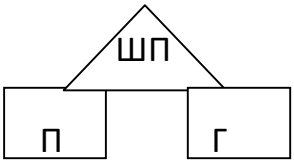
ʁ. 

Əp

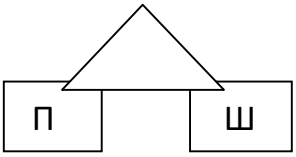
Ema Yekpa enyagan [quantitative reasoning in division]

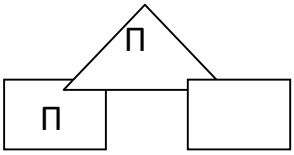
Eri zhi [examples]

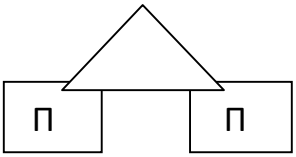


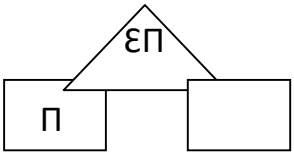


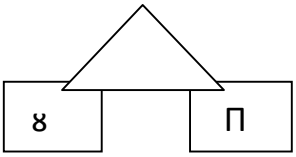
Etun **Пʁ** [exercise 58]

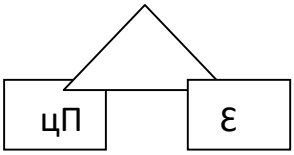
І. 

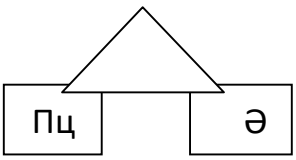
ц. 

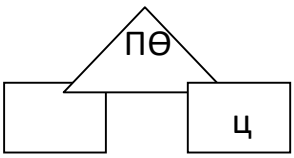
Ш. 

Є. 

П. 

Ə. 

Г. 

ʁ. 

гӨ

Efin/Eka [time]

Ezo nya efin [time word problem]

Eri zhi [examples]

Baci = second, Gika = minute, Kakun = hour

Mi sanle efin Ə, mici dazan nya gika ШӨ, efin gunkin mi nya tun kpikpewababa o? efin Ə:ШӨ.

Etun **əI** [exercise 61]

I. Yi kpegwa kpikpewaba o efin ц, yi dazan gika цӨ. Efin gukin ya tun emi o?

Ц. Efin ɛ kosun a cya, lo efin Ə:ШӨ. Efin gukin a ce kosun o?

Ш. Nnamamuna lo kpikpewaba efin Г:ШӨ haribe efin ц:ШӨ. Kakun gukin a jin dan kpikpewaba bo?

Ɛ. Kakun gukin dan gbako foeni bo?

П. Gika gukun dan gbako foeni bo?

Ə. Baci gukin dan gbako foeni bo?

Г. Nnadwa bo eje egwa efin Ə lo efin ʁ. Kakun gukin wan bo eje o?

ʁ. Egi wawagi zhi e lele kakun guwo gbako yeshi nini o. Aga cya ele daga efin ʁ lo efin П fafa. Efin gukin a le ele a nya o?

Р. Kakun gukin fi gbako efo guta bo? A ezhe wo e ganfi gutwanyi. Gukin fondondo a de o?

IӨ. Efin gunni yi e la kpegwa etunba bo gwata fobaci lo fotsunci. Jinma foe yi efin guwo be gube. Kakun gukin Jinma nya gbagba gan efo nake nazhi o?

II. Nusa zhi e lele kakun gutswanyi gbako yeshi nini o. Aga cya ele egwa efin IӨ lo efin П fafa. Efin gukin a le ele a nya o?

Iц. Kakun gukin fi gbako efo guta bo? A ezhe wo e ganfi guta. Gukin fondondo a de o?

IШ. Efin gunni yi nya la kpegwa etunba bo egwa fobaci lo fotsunci. Jinma foe yi efin nini. Kakun gukin Jinma nya gbagba gan efo nake nazhi o?

ГI

Efin/Eka [time]

Ezo nya efin [time word problem]

Eri zhi [examples]

Baci = second, Gika = minute, Kakun = hour

Mi sanle efin П, mici dazan nya kakun Ш, efin gunkin mi nya tun kpikpewaba o? efin ȣ.

Etun **Әц** [exercise 62]

I. Yi kpegwa kpikpewaba o efin Ш:ШӨ, yi dazan gika цӨ. Efin gukin ya nya tun emi o?

Ц. Efin П kosun a cya, lo efin Г. Kakun gukin a ce kosun o?

Ш. Gana lo kpikpewaba efin Ә:ШӨ haribe efin ц:ШӨ. Kakun gukin a jin dan kpikpewaba bo?

Ɛ. Kakun gukin dan gbako efo guba bo?

П. Gika gukun dan gbako guta bo?

Ә. Baci gukin dan gbako guba bo?

Г. Nnawo bo eje ningbana egwa efin П lo efin ȣ. Kakun gukin wan bo eje o?

ȣ. Egi wawagi zhi e lele Kakun guwo be guba e gbako yeshi nini o. Aga cya ele egwa efin ȣ lo efin П fafa. Efin gukin a le ele a nya o?

Р. Kakun gukin fi gbako efo gutsun bo? A ezhe wo e ganfi gutswanyi. Gukin fondondo a de o?

IӨ. Efin gutsun yi nya e la kpegwa etunba bo egwa fobaci lo fotsunci. Jinma foe yi efin guwo be gube. Kakun gukin Jinma nya gbagba gan efo nake nazhi o?

II. Nusa zhi e lele kakun gutota gbako yeshi nini o. Aga cya ele egwa efin IӨ lo efin ȣ lazhin. Efin gukin a le ele a nya o?

Iц. Kakun gukin fi gbako efo guwo bo? A ezhe wo e ganfi gutsun. Gukin fondondo a de o?

IШ. Efin gunni yi nya e la kpegwa etunba bo egwa fotaci lo fotsunci. Jinma foe yi efin nini. Kakun gukin Jinma nya gbagba gan efo nake nazhi o? wola Kakun gunni o be ezhe wo e.

Гц

Efozhi [days]

Foeni	Fobaci	Fotaci	Fonici	Fotsunci	Juma	Fotwabaci

Etun **әШ** [exercise 63]

I. Foci zhi cya be egimika ‘F’ nya o?

Ц. Efo gukin de egimika ‘A’ nya o?

Ш. Efo gukin de egimika guni o [Ɛ]?

Ɛ. A efo nanazhi ta kendo gonyi na;

a. Fonici, Fotaci, Fotsunci

b. Fobaci, Fonici, Fotaci

c. Juma, Fobaci, Fotswabaci

d. Fotaci, Juma, Fotwabaci, Fobaci, Foeni, Fonici, Fotsunci

П. Foci zhimitu Fobaci o?

Ә. Foci Musulumi zhi elo Wunwunba o?

Г. Foci Mishan zhi e lo Wunwunba o?

ƪ. Efo gukin egizhi e la lo Kpikpewaba Nasara gokati nini o?

ρ. Tun eyi fona zhi yi nya e lo Kpikpewaba Nasara a na ye.

IӨ. Foci ezazhi e lo dzuko Minna o?

II. Efo gukin fi gbako gokati nini bo?

Iц. Fotsunci be Foeni de egimikagi gukin?

IШ. Ka enya guta nazhi wo e jin efoeni na?

IƐ. Ki nupenci zhi e yi enya na Man laya wo e Kpikpewaba o gan woda o jin nbo na o?

IП. Foci dan tacin efo zhi bo?

ГШ

Efozhi [days]

Foeni	Fobaci	Fotaci	Fonici	Fotsunci	Jima- [Fotswanyici]	Fotwabaci

Etun **әШ** [exercise 63]

I. Foci zhi cya be egimika ‘F be J’ nya o?

Ц. Efo gukin de egimika ‘A be O’ nya o?

Ш. Efo gukin de egimika gutsun o?

Ɛ. A efo nanazhi ta kendo gonyi na;

a. Fonici, Fotaci, Fotsunci

b. Fobaci, Fonici, Fotaci

c. Jima, Fobaci, Fotswabaci

d. Fotaci, Juma, Fotwabaci, Fobaci, Foeni, Fonici, Fotsunci

П. Foci zhimitu Fotaci o?

Ә. Foci Musulumi zhi e lo Wunwunba Jima nya o?

Г. Foci Mishan zhi e lo Wunwunba Foenici o?

ƪ. Efo gukin egizhi e la lo Kpikpewaba Nasara gokati nini o?

ρ. Tun eyi fona zhi yi nya e lalo Kpikpewaba Nasara na ye.

IӨ. Foci ezazhi e lo dzuko Gaye o?

II. Efo gukin fi gbako gokati guba bo?

Iц. Fotsunci be Foeni de egimikagi gukin?

IШ. Ka enya gutsun nazhi wo e jin efoeni na?

IƐ. Ki nupenci zhi e yi enya na Man nya la kanya Kpikpewaba o ba patakun o na o?

IП. Foci dan tacin efo zhi bo, efo kici ma zhinmitu won o?

Гɛ

Ewo [Money]

Etun Ewozhi

Ki nupenci zhi e yi near o?

Ewo enya wunyo na ela shinya zhi na. [Lulo be Gugo e]

Yide ewo titi guba. [ewo dakagi be nyakpa e]

Ewo nyakpa; washi enya nazhi malo a na byanyi.

Ewo dakagi, washi enya nazhi malo na byanyi.

Etun Ewozhi

a. wo a shi enya lulocizhi.

b. wo a dan zantso.

c. wo a la ewo dan esobagi o.

d. wo a la ewo twarya.

Etun ƏƠ [exercise 65]

a. Baza enya nazhi wajin be ewo e na.

b. Gan ya man nya wo e, enyana gala ewo ci zho nyi de na.

c. Ke ba egan dan emi bo?

d. Ke yi ezaguba nazhi e lotun be ewo e na kata enya kun bo?

e. Ki nupenci zhi e yi ewo panyi o?

f. San wani ba dakagi wobo.

Ewo [Money]

Etun **ƏƏ** [exercise 66]

Enyashi	Ewoya	Nakena [chenji]
Kili #IӨ	#цП	#IП
Kosun Bici #цП	#ƐӨ	#
Enugi #П	#IӨ	#
Ekagi #IӨ	#ПӨ	#
Egizhi #цӨ	#цП	#
Ponto #ƏӨ	#цӨӨ	#
Eda #цӨӨ	# цӨӨ	#
Rufuta #цӨӨ	#ПӨӨ	#
Efin #ПӨӨ	#ƏӨӨ	#
Ewo #ƏӨӨ	#ρӨӨ	#
Gura #ρӨӨ	#IӨӨӨ	#
Kpere #ρӨ	#ШӨӨ	#
Gbogungbogun #ШӨӨ	#IӨӨӨ	#
Bayele #IӨӨӨ	#цӨӨӨ	#
Fere #IӨӨ	#ШӨӨ	#
Esa #ƏӨӨ	#ƏӨӨӨ	#
Zongun #ƐӨӨ	#ПӨӨ	#
Efin #цӨӨӨ	#ƏӨӨӨ	#
Kpasa #цПӨӨ	#ШӨӨӨ	#
Ekpa kana #ШӨӨӨ	#ГӨӨӨ	#
Zantso #ГӨӨӨ	# IӨ,ӨӨӨ	#

Гə

Ewo [Money]

Etun **ƏГ** [exercise 67]

Enyashi	Ewoya	Nakena [chenji]
Kpace #IПӨ	#цПП	#IӨП
Tasa #цӨП	#ƐӨӨ	#
Mungoro #ПӨ	#IӨӨ	#
Lemu #IӨӨ	#ПӨӨ	#
Kungu #цӨӨ	#цПӨ	#
Daro #ƏӨӨ	#цӨӨӨ	#
Kodogi #цӨӨӨ	# цӨӨӨ	#
Gbangbani #цӨӨӨ	#ПӨӨӨ	#
Tarabi #ПӨӨӨ	#ƏӨӨӨ	#
Ega bishe #ƏӨӨӨ	#ρӨӨӨ	#
Namba #ρӨӨӨ	#IӨӨӨӨ	#
Epun #ρӨӨ	#ШӨӨӨ	#
Dukun #ШӨӨ	#IӨӨӨӨ	#
Nangi #IӨӨӨӨ	#цӨӨӨӨ	#
Nanko #IӨӨӨӨ	#ШӨӨӨӨ	#
Rakun #ƏӨӨӨ	#ƏӨӨӨ	#
Tyatyagi #ƐПӨӨ	#ППӨӨ	#
Dunkugi #цПӨӨӨ	#ƏПӨӨӨ	#
Elugi #цПӨӨ	#ШӨӨӨ	#
Lungoyi #ШПӨӨӨ	#ГПӨӨӨ	#
Doko #ГПӨӨ	# IӨ,ӨӨӨ	#

ГГ

Eri enya gan [division]

ц	Ш	Ɛ	П	Ə	Г	ȣ	ρ	Iθ	II	Iц
I = ц	I = Ш	I = Ɛ	I = П	I = Ə	I = Г	I = ȣ	I = ρ	I = Iθ	I = II	I = Iц
Ц = Ɛ	Ц = Ə	Ц = ȣ	Ц = Iθ	Ц = Iц	Ц = Iɛ	Ц = Iə	Ц = Iȣ	Ц = цθ	Ц = цц	Ц = цɛ
Ш = Ə	Ш = Р	Ш = Iц	Ш = IП	Ш = Iȣ	Ш = цI	Ш =цɛ	Ш =цГ	Ш =Шθ	Ш=ШШ	Ш=Шə
Ɛ = ȣ	Ɛ = Iц	Ɛ = Iə	Ɛ = цθ	Ɛ = цɛ	Ɛ = цȣ	Ɛ =Шц	Ɛ =Шə	Ɛ = Ɛθ	Ɛ = Ɛɛ	Ɛ = Ɛȣ
П = Iθ	П = IП	П =цθ	П =цП	П =Шθ	П =ШП	П = Ɛθ	П = ɛП	П = Пθ	П = ПП	П = əθ
Ə = Iц	Ə = Iȣ	Ə = цɛ	Ə =Шθ	Ə =Шə	Ə = Ɛц	Ə = Ɛȣ	Ə = Пɛ	Ə = əθ	Ə = əə	Ə = Гц
Г = Iɛ	Г = цI	Г = цȣ	Г =ШП	Г = Ɛц	Г = Ɛρ	Г = Пə	Г =əШ	Г = Гθ	Г = ГГ	Г = ȣɛ
ȣ = Iə	ȣ = цɛ	ȣ =Шц	ȣ = Ɛθ	ȣ = Ɛȣ	ȣ = Пə	ȣ = əɛ	ȣ = Гц	ȣ = ȣθ	ȣ = ȣȣ	ȣ = ρə
Р = Iȣ	Р = цГ	Р =Шə	Р = ɛП	Р = Пɛ	Р =əШ	Р = Гц	Р = ȣI	Р = ρθ	Р = ρρ	Р = Iθȣ
Iθ=цθ	Iθ=Шθ	Iθ =Ɛθ	Iθ =Пθ	Iθ = əθ	Iθ = Гθ	Iθ = ȣθ	Iθ = ρθ	Iθ=Iθθ	Iθ = IIθ	Iθ =Iцθ
II = цц	II=ШШ	II = Ɛɛ	II = ПП	II = əə	II = ГГ	II = ȣȣ	II = ρρ	II = IIθ	II = IцI	II = IШц
Iц=цɛ	Iц=Шə	Iц = Ɛȣ	Iц =əθ	Iц = Гц	Iц = ȣɛ	Iц = ρə	Iц = Iθȣ	Iц =Iцθ	Iц =IШц	Iц = Iɛɛ

Eri [example]

A gbara Ɛ gan ya eza ц = Gbara ц

Etun Əȣ [exercise 68]

I. A bishe Iθ gan ya eza ц.

Ц. A dangi IП gan ya eza Ш.

Ш. A lukuku цθ gan ya eza Ɛ.

Ɛ. A shigi цП gan ya eza П.

П. A elugi Шθ gan ya eza Ə.

Ə. A gulu ШП gan ya eza Г.

Г. A etsu Ɛθ gan ya eza ȣ.

ȣ. A pinpyara ɛП gan ya eza ρ.

Р. A elugi Пθ gan ya eza Iθ.

Iθ. A ewo Iθθ gan ya eza Iθ.

Eri enya gan [division]

ц	**Ш**	**Ɛ**	**П**	**Ə**	**Г**	**ȣ**	**ρ**	**Iθ**	**II**	**Iц**
I = ц	I = Ш	I = Ɛ	I = П	I = Ə	I = Г	I = ȣ	I = ρ	I = Iθ	I = II	I = Iц
Ц = Ɛ	Ц = Ə	Ц = ȣ	Ц = Iθ	Ц = Iц	Ц = Iɛ	Ц = Iə	Ц = Iȣ	Ц = цθ	Ц = цц	Ц = цɛ
Ш = Ə	Ш = Р	Ш = Iц	Ш = IП	Ш = Iȣ	Ш = цI	Ш =цɛ	Ш =цГ	Ш =Шθ	Ш=ШШ	Ш=Шə
Ɛ = ȣ	Ɛ = Iц	Ɛ = Iə	Ɛ = цθ	Ɛ = цɛ	Ɛ = цȣ	Ɛ =Шц	Ɛ =Шə	Ɛ = Ɛθ	Ɛ = Ɛɛ	Ɛ = Ɛȣ
П = Iθ	П = IП	П =цθ	П =цП	П =Шθ	П =ШП	П = Ɛθ	П = ɛП	П = Пθ	П = ПП	П = əθ
Ə = Iц	Ə = Iȣ	Ə = цɛ	Ə =Шθ	Ə =Шə	Ə = Ɛц	Ə = Ɛȣ	Ə = Пɛ	Ə = əθ	Ə = əə	Ə = Гц
Г = Iɛ	Г = цI	Г = цȣ	Г =ШП	Г = Ɛц	Г = Ɛρ	Г = Пə	Г =əШ	Г = Гθ	Г = ГГ	Г = ȣɛ
ȣ = Iə	ȣ = цɛ	ȣ =Шц	ȣ = Ɛθ	ȣ = Ɛȣ	ȣ = Пə	ȣ = əɛ	ȣ = Гц	ȣ = ȣθ	ȣ = ȣȣ	ȣ = ρə
Р = Iȣ	Р = цГ	Р =Шə	Р = ɛП	Р = Пɛ	Р =əШ	Р = Гц	Р = ȣI	Р = ρθ	Р = ρρ	Р = Iθȣ
Iθ=цθ	Iθ=Шθ	Iθ =Ɛθ	Iθ =Пθ	Iθ = əθ	Iθ = Гθ	Iθ = ȣθ	Iθ = ρθ	Iθ=Iθθ	Iθ = IIθ	Iθ =Iцθ
II = цц	II=ШШ	II = Ɛɛ	II = ПП	II = əə	II = ГГ	II = ȣȣ	II = ρρ	II = IIθ	II = IцI	II = IШц
Iц=цɛ	Iц=Шə	Iц = Ɛȣ	Iц =əθ	Iц = Гц	Iц = ȣɛ	Iц = ρə	Iц = Iθȣ	Iц =Iцθ	Iц =IШц	Iц = Iɛɛ

Eri [example]

A Dangi ɛП gan ya eza П = Dangi Р

Etun **əρ** [exercise 69]

I. A bishe IθΘ gan ya eza ц.

Ц. A dangi IПΘ gan ya eza Ш.

Ш. A lukuku цΘ gan ya eza Ɛ.

Ɛ. A shigi цПΘ gan ya eza П.

П. A elugi ШΘΘ gan ya eza Ə.

Ə. A gulu ШПΘ gan ya eza Г.

Г. A etsu ɛΘΘ gan ya eza ȣ.

ȣ. A pinpyara ɛПΘ gan ya eza ρ.

Р. A elugi ПΘΘ gan ya eza IΘ.

IΘ. A ewo IΘΘΘ gan ya eza IΘ.

Гρ

Enya gan [division]

Eri [example]

Р ÷ □ = Ш

Etun **Гө** [exercise 70]

І. ШӨ ÷ □ = П

ц. ШП ÷ □ = Г

Ш. ЄӨ ÷ □ = ӄ

Є. ЄП ÷ □ = ρ

П. ПӨ ÷ □ = ІӨ

Ә. ПП ÷ □ = ІІ

Г. ӘӨ ÷ □ = Іц

ӄ. ӘП ÷ □ = П

ρ. ГП ÷ □ = П

ІӨ. ӄӨ ÷ □ = ІӨ

ІІ. ӄП ÷ □ = Г

Іц. ρӨ ÷ □ = ρ

ІШ. ρП ÷ □ = П

ІЄ. ІӨӨ ÷ □ = П

ІП. цӨӨ ÷ □ = цӨ

ІӘ. ШӨӨ ÷ □ =ШӨ

ІГ. ЄӨӨ ÷ □ = ШӨ

Enya gan [division]

Eri [example]

Р ÷ □ = Ш

Etun **ГІ** [exercise 71]

І. ШӨӨ ÷ □ = П

ц. ШПӨ ÷ □ = Г

Ш. ЄӨӨ ÷ □ = Є

Є. ЄПӨ ÷ □ = ρ

П. ПӨӨ ÷ □ = ПӨ

Ә. ППӨ ÷ □ = ПӨ

Г. ӘӨӨ ÷ □ = ӘӨ

ӄ. ӘПӨ ÷ □ = П

ρ. ГПӨ ÷ □ = ПӨ

ІӨ. ӄӨӨ ÷ □ = ӄӨ

ІІ. ӄПӨ ÷ □ = П

Іц. ρӨӨ ÷ □ = ІӨӨ

ІШ. ρПӨ ÷ □ = ІӨӨ

ІЄ. ІӨӨӨ ÷ □ = ІӨӨ

ІП. цӨӨӨ ÷ □ = ІӨӨ

ІӘ. ШӨӨӨ ÷ □ = ІӨӨ

ІГ. ЄӨӨӨ ÷ □ = ІӨӨ

Enya gan [division]

Eri [example]

$\frac{\text{цθ}}{\text{ц}} = \text{Iθ}$ $\frac{\text{цθ}}{\text{цθ}} = \text{I}$

Etun **ГЦ** [exercise 72]

I.	$\sqrt[\text{ц}]{\text{ʁ}}$	I.	$\frac{\text{цθ}}{\text{ц}}$	Ц.	$\frac{\text{цθθθ}}{\text{цθθ}}$
Ц.	$\sqrt[\text{ц}]{\text{цθ}}$	Ц.	$\frac{\text{Шθ}}{\text{Ш}}$	Ц.	$\frac{\text{цθθθθθ}}{\text{цθθθθ}}$
Ш.	$\sqrt[\text{ц}]{\text{Шθ}}$	Ш.	$\frac{\text{Єθ}}{\text{Є}}$	Ц.	$\frac{\text{цθθθ}}{\text{цθθ}}$
Є.	$\sqrt[\text{ц}]{\text{Єθ}}$	Є.	$\frac{\text{Пθ}}{\text{П}}$	Ц.	$\frac{\text{цθθθθθθθ}}{\text{цθθθθ}}$
П.	$\sqrt[\text{ц}]{\text{Пθ}}$	П.	$\frac{\text{Əθ}}{\text{Ə}}$	Ц.	$\frac{\text{цθθθ}}{\text{цθθθθ}}$
Ə.	$\sqrt[\text{ц}]{\text{цƏθ}}$	Ə.	$\frac{\text{Гθ}}{\text{ц}}$	Ə.	$\frac{\text{Гθθθ}}{\text{цθθ}}$
Г.	$\sqrt[\text{ц}]{\text{Əцθ}}$	Г.	$\frac{\text{ρθ}}{\text{ρ}}$	Г.	$\frac{\text{цθθθθ}}{\text{цθθ}}$
ʁ.	$\sqrt[\text{Г}]{\text{Гθ}}$	ʁ.	$\frac{\text{Iθθ}}{\text{ц}}$	ʁ.	$\frac{\text{цθθθθθ}}{\text{цθθθ}}$
ρ.	$\sqrt[\text{ʁ}]{\text{ʁʁθ}}$	ρ.	$\frac{\text{цIθθθ}}{\text{ц}}$	ρ.	$\frac{\text{цθ}}{\text{цθθ}}$
Iθ.	$\sqrt[\text{ʁ}]{\text{цʁθ}}$	Iθ.	$\frac{\text{цIθθθ}}{\text{цIθθ}}$	Iθ.	$\frac{\text{цθθθ}}{\text{цθθ}}$
II.	$\sqrt[\text{ц}]{\text{ρцθ}}$	II.	$\frac{\text{цθθθ}}{\text{ц}}$	II.	$\frac{\text{Шθθθθ}}{\text{ц}}$
Iц.	$\sqrt[\text{ц}]{\text{Iцθ}}$	Iц.	$\frac{\text{Шθθθ}}{\text{Шθθ}}$	Iц.	$\frac{\text{цШθθθ}}{\text{цШθθ}}$
Iш.	$\sqrt[\text{ц}]{\text{IIцθ}}$	Iш.	$\frac{\text{Əцθ}}{\text{ц}}$	Iш.	$\frac{\text{цƏθ}}{\text{ц}}$
Iє.	$\sqrt[\text{ц}]{\text{цIIθ}}$	Iє.	$\frac{\text{цƏθ}}{\text{ц}}$	Iє.	$\frac{\text{ƏƏθ}}{\text{ц}}$

ʁЦ

Enya gan [division]

Eri [example]

$\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta} = \text{I}\Theta$ $\qquad$ $\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta} = \text{I}$

Etun **ГШ** [exercise 73]

I. $\sqrt[\text{ц}]{\text{ʁ}\Theta\Theta}$

Ц. $\sqrt[\text{ц}]{\text{ц}\Theta\Theta\Theta}$

Ш. $\sqrt[\text{ц}]{\text{Ш}\Theta\Theta\Theta}$

Ɛ. $\sqrt[\text{ц}]{\text{Ɛ}\Theta\Theta\Theta}$

П. $\sqrt[\text{ц}]{\text{П}\Theta\Theta\Theta}$

Ə. $\sqrt[\text{ц}]{\text{цƏ}\Theta\Theta\Theta}$

Г. $\sqrt[\text{ц}]{\text{Əц}\Theta\Theta\Theta}$

ʁ. $\sqrt[\text{Г}]{\text{Г}\Theta\Theta\Theta}$

ρ. $\sqrt[\text{ʁ}]{\text{ʁʁ}\Theta\Theta\Theta}$

IӨ. $\sqrt[\text{ʁ}]{\text{цʁ}\Theta\Theta\Theta}$

II. $\sqrt[\text{ц}]{\rho\text{ц}\Theta\Theta\Theta}$

IЦ. $\sqrt[\text{ц}]{\text{I}\Theta\Theta\text{ц}\Theta}$

IШ. $\sqrt[\text{ц}]{\text{II}\text{ц}\Theta\Theta\Theta}$

IƐ. $\sqrt[\text{ц}]{\text{цII}\Theta\Theta\Theta}$

I. $\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta}$

Ц. $\frac{\text{Ш}\Theta\Theta\Theta}{\text{Ш}\Theta\Theta}$

Ш. $\frac{\text{Ɛ}\Theta\Theta\Theta}{\text{Ɛ}\Theta\Theta}$

Ɛ. $\frac{\text{П}\Theta\Theta\Theta}{\text{П}\Theta\Theta}$

П. $\frac{\text{Ə}\Theta\Theta\Theta}{\text{Ə}\Theta\Theta}$

Ə. $\frac{\text{Г}\Theta\Theta\Theta}{\text{ц}\Theta\Theta}$

Г. $\frac{\rho\Theta\Theta\Theta}{\rho\Theta\Theta}$

ʁ. $\frac{\text{I}\Theta\Theta\Theta}{\text{ц}\Theta\Theta}$

ρ. $\frac{\text{цI}\Theta\Theta\Theta}{\text{ц}\Theta\Theta}$

IӨ. $\frac{\text{цI}\Theta\Theta\Theta}{\text{цI}\Theta\Theta\Theta}$

II. $\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta}$

IЦ. $\frac{\text{Ш}\Theta\Theta\Theta}{\text{Ш}\Theta\Theta\Theta}$

IШ. $\frac{\text{Əц}\Theta}{\text{ц}\Theta\Theta}$

IƐ. $\frac{\text{цƏ}\Theta}{\text{ц}\Theta\Theta}$

I. $\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta}$

Ц. $\frac{\text{ц}\Theta\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta\Theta\Theta}$

Ш. $\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta}$

Ɛ. $\frac{\text{ц}\Theta\Theta\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta\Theta\Theta}$

П. $\frac{\text{ц}\Theta\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta}$

Ə. $\frac{\text{Г}\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta}$

Г. $\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta}$

ʁ. $\frac{\text{ц}\Theta\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta\Theta}$

ρ. $\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta}$

IӨ. $\frac{\text{ц}\Theta\Theta\Theta}{\text{ц}\Theta\Theta\Theta}$

II. $\frac{\text{Ш}\Theta\Theta\Theta}{\text{ц}\Theta\Theta}$

IЦ. $\frac{\text{цШ}\Theta\Theta\Theta}{\text{цШ}\Theta\Theta}$

IШ. $\frac{\text{цƏ}\Theta}{\text{ц}\Theta\Theta}$

IƐ. $\frac{\text{ƏƏ}\Theta\Theta\Theta}{\text{ц}\Theta\Theta}$

ʁ**Ш**

Ezo enya gan [word problem on division]

Eri [example]

A enya цӨ gan ya eza Ɛ. Wade П.

Etun **Γε** [exercise 74]

I. Za guta lo Bida, aci twarya Kpanu nuwanfin shini be guwo e. zeni Kpanu gukin zeni ndondo a de o?

Ц. Ezan Minna lo Sachi yi #IӨӨӨ eti meli IӨӨkm. Woga dazan meli цПkm, wakin wan ya wo e nya o?

Ш. Ndaba nunu esun ӘӨӨ. Esun nini ndondo yi ewo nera #цӨ. Wokin yi esun ШӨӨ o?

Ɛ. Lati de gbara IIП. Gbara gukin eza П a sa o?

П. Ndagiman go ewo etun #ГӨӨ, wan #ƐӨӨ shi enyagici, wunda ewo nakena wogbata Kpikpewaba nya egi Ə . Wokin yi ewo Kpikpewaba zeni ndondo o?.

Ə. Awushe de dakagi цӨӨ, wan IӨӨ gan ya eza ПӨ. Dakagi gukin zandondo a de o?.

Г. Zugukin wa li efo Г mini etswa nini nya o?.

ʁ. A etswa nadan eya nini o na ganfi Ə. Etswa gukin ke o?.

ρ. Eza sunsun ρ lo Mokwa aci ya Kpansanako tarabi ρӨӨ. Kpansanako gukin zeni ndondo a de o?

IӨ. Ezan Gaye be Lapayi yi #цӨӨӨ eti IӨӨkm. Woga dazan цПkm, wakin wan ya wo e nya o?

II. NdaAdamu go epin gura ƐӨӨ. Gura nini ndondo yi ewo nera #ПӨ. Wokin yi epin Gura ШӨӨ o?

Iц. Kun nya ezhi yi de epe ППӨ. Epe gukin kun ПӨ a de o?

IШ. Nnako go ewo etun-ebafin #ШӨӨӨ, wan #ӘӨӨ shi Jekafa, wunda ewo nakena wo gbata Ninya. Wakin yi ganfi ewo tswa wan o?.

IƐ. Wo e fu nuwan zuguta mini foeni o. Zugukin wa fu nuwan mini etswa guta bo?.

ʁ. A etswa nadan eya nini o na ganfi guta. Etswa gukin ke o?.

Ezo enya gan [word problem on division]

Eri [example]

A enya цӨ gan ya eza Ɛ. Wade П.

Etun **ГП** [exercise 75]

I. Za gutwaba lo Bida aci ya Kpanu nuwanfin shitsun be guwo e. Kpanu gukin zeni ndondo a de o?

Ц. Ezan Minna lo Badegi yi #IӨ,ӨӨӨ eti meli IӨӨӨkm. Woga dazan meli цПӨkm, wakin wan ya wo e nya?

Ш. Ndaba nunu esun ƏӨӨӨ. Esun nini ndondo yi ewo nera #цӨӨ. Wakin yi esun ШӨӨ o?

Ɛ. Lati de gbara IIПӨ. Gbara gukin eza ПӨ a sa o?

П. Baba go ewo etun #ГӨӨӨ, wan #ƐӨӨӨ shi enyagici, wunda ewo nakena wogbata Kpikpewaba nya egi Ə . Wokin yi ewo Kpikpewaba zeni ndondo o?.

Ə. Sakina de enyakagi цӨӨӨ, wan IӨӨӨ gan ya eza ПӨӨ. Enyakagi gukin zandondo a de o?.

Г. Zugukin wa li efo ГӨ mini nya gutwaba bo?.

ʁ. A etswa nadan eya nini o na ganfi Ɛ. Etswa gukin ke o?.

ρ. Eza sunsun Ɛ lo Mokwa, aci ya Zambu tarabi ƐӨӨ. Zambu gukin zeni ndondo a de o?

IӨ. Ezan Enagi be Katcha e yi #ƐӨӨӨ eti ƐӨӨkm. Woga dazan цПkm, wakin wan ya wo nya o?

II. Ndabu go paragi gura ƐӨӨӨ. Gura nini ndondo yi ewo nera #ПӨӨ. Wakin yi paragi gura ШӨӨӨ o?

Iц. Kun nya ezhi yi de epe ППӨ. Epe gukin kun ПӨ a de o?

IШ. Nnako go ewo etun-ebafin #ШӨӨӨӨ, wan #ƏӨӨӨ shi ezo, wunda ewo nakena wogbata kulatsaka. Wakin yi ganfi nya ewo kula o?.

IƐ. Wo e na emi zuguta foeni. Zu gukin wo e na emi etswa gutswanyi o?.

ʁ. A etswa nadan eya nini o na ganfi guta. Etswa gukin ke o?.

Gbagbangi, Bedozhi, Eda [lowest common multiple]

GBE [LCM]

Egi nanazhi e ye gan be egi ndondo nya seyi nini be eti tacin a nyi.

Ц	Ш	П	Г	II	IШ	IГ
Iр	цШ	цр	ШI	ШГ	Шр	ЄI
ЄШ	ЄГ	ПЄ	ПГ	Пр	ƏI	ƏГ
ГI	ГШ	Гр	ʁЄ	ʁр	рI	рГ

Yekpe zhi [definations]

I. Bwadwa [factor] ; Woga egi gan be egi ndoci wunma a ke a.

Ц. Kpaku [prime]; Wan e ye gan be egi ndondo nya seyi nini be eti tacin a nyi.

Ш. Kpaku be bwadwa e; Wun yi bwadwa nya egi tashiru zhi.
Bwadwa nya Ə yi, ц be Ш
Be acin e, ц be Є= ʁ

Eri I [example]

Wa Bwadwa nya egi; цЄ, ЄΘ, IЄ, IƏ.

Ezhe [solution]

I. Bwadwa цЄ; I, ц, Ш, Є, Ə, ʁ, Iц be цЄ.

Ц. Bwadwa ЄΘ;I, ц, Є, П, ʁ, IΘ, цΘ, be ЄΘ.

Ш. Bwadwa IЄ; I, ц, Г, be IЄ.

Є. Bwadwa IƏ; I, ц, Є, be IƏ.

Eri ц [example]

a. ka egizhi na zhin zuma цΘ na.

I	ц	Ш	Є	П	Ə	Г	ʁ	р	IΘ
II	Iц	IШ	IЄ	IП	IƏ	IГ	Iʁ	Iр	цΘ

b. Ka egizhi na zhin zuma ƐΘ na, wunci yi eda Π zhi.

Π IΘ IΠ цΘ цП ШΘ ШП ƐΘ

c. Ka egizhi na zhin zuma цΘ na, wunci yi kpaku-bwada na.

I ц Ш П Г II IШ IГ Iρ

Eri **Ш** [example]

A egi nana zhi zhe ke eda nya kpaku-bwadwa na.

ƏΘ, IʁƏ, цƐ, ШΘ, Шц, IП

I.

Ц	ƏΘ
Ц	ШΘ
Ш	IП
П	П
	I

Ц × Ц × Ш × П = ƏΘ

Ц.

Ц	IʁƏ
Ш	ʁШ
ШI	ШI
	I

Ц × Ш × ШI = IʁƏ

Ш.

Ц	цƐ
Ц	Iц
Ц	Ə
Ш	Ш
	I

Ц × Ц × Ц × Ш = цƐ

Ɛ.

Ц	ШΘ
Ш	IП
П	П
	I

П.

Ц	Шц
Ц	IƏ
Ц	ʁ
Ц	Ɛ
Ц	Ц
	I

Ə.

Ш	IП
П	П
	I

Etun **Гə** [exercise 76]

I. Ka egi zhi egwa nini o lo [I] arata [ПΘ].

Ц. Ka egizhi na zhin zuma ρΘ na, wunci yi eda Π zhi.

Ш. Ka egizhi na zhin zuma IцΘ na, wunci yi kpaku-bwada na.

A egi nana zhi zhe ke *GBE* nya kpaku-bwadwa zhi na.

[express each numbers in ***LCM*** as a product of their prime factors]

Etun **ГГА** [exercise 77]

I. [a] цП [b] ШӨ [c] ПӨ [d] ӘӨ [e] ГӨ

Ц. [a] ʁӨ [b] ρӨ [c] IӨӨ [d] IIӨ [e] IЦӨ

Ш. [a] IШӨ [b] IƐӨ [c] IПӨ [d] IӘӨ [e] IГӨ

Ɛ.[a] IцП [b] IIШӨ [c] IIПӨ [d] IIӘӨ [e] IIГӨ

П. [a] ПцП [b] ПШӨ [c] ППӨ [d] ПӘӨ [e] ПГӨ

Etun **ГГВ** [exercise 77]

I. [a] ӘцП [b] ӘШӨ [c] ӘПӨ [d] ӘӘӨ [e] ӘГӨ

Ц. [a] ʁӘӨ [b] ρӘӨ [c] IӘӨӨ [d] IӘIӨ [e] IӘЦӨ

Ш. [a] IШӘӨ [b] IƐӘӨ [c] IПӘӨ [d] IӘӘӨ [e] IГӘӨ

Ɛ.[a] IцПӘ [b] IIШӨӘ [c] IIПӨӘ [d] IIӘӨӘ [e] IIГӨӘ

П. [a] ПцПӨ [b] ПШӨӨ [c] ППӨӨ [d] ПӘӨӨ [e] ПГӨӨ

Ә. [a] ПцПӨӨ [b] ПШӨӨӨ [c] ППӨӨӨ [d] ПӨӨӨ [e] ПГӨӨӨ

Etun **ГГС** [exercise 77]

A egi nana zhi ze ke eda nya kpaku-bwadwa na.

I. [a] ӘцПӨ [b] ӘШӨӨ [c] ӘПӨӨ [d] ӘӘӨӨ [e] ӘГӨӨ

Ц. [a] ʁӘӨӨ [b] ρӘӨӨ [c] IӘӨӨӨ [d] IӘIӨӨ [e] IӘЦӨӨ

Ш. [a] IШӘӨӨ [b] IƐӘӨӨ [c] IПӘӨӨ [d] IӘӨӨ [e] IГӨӘӨ

Ɛ.[a] IцПӘӨ [b] IIШӨӘӨ [c] IIПӨӘӨ [d] IӘӨӘ [e] IӨГӨӘ

П. [a] ПцПӨӨ [b] ПШӨӨӨ [c] ППӨӨӨ [d] ПӨӨӨ [e] ПГӨӨӨ

Ә. [a] ПцППП [b] ПШППӨ [c] ППППӨ [d] ПӘПӨ [e] ПГӨПП

A egi nana zhi ze ke eda nya kpaku-bwadwa zhi na.

[Express each numbers as a product of their prime factors]

Eri [example]

I . ƏΘ be IʁƏ, Ц. IʁƏ, be цƐ,

I.

Ц	ƏΘ	IʁƏ
Ц	ШΘ	ʁШ
Ш	IП	ʁШ
П	П	ШI
ШI	I	ШI
		I

Ц.

Ц	IʁƏ	цƐ
Ц	ʁШ	Iц
Ц	ШI	Ə
Ш	ШI	Ш
ШI	ШI	I
	I	

Ц × Ц × Ш × П × ШI = IʁƏΘ

Ц × Ц × Ц × Ш × ШI = ГƐƐ

Etun **Г**ʁ [exercise 78]

I. [a] цП be ШΘ [b] ШΘ be ПΘ [c] ПΘ be ƏΘ [d] ƏΘ be ГΘ

Ц. [a] ʁΘ be ρΘ [b] ρΘ be IΘΘ [c] IΘΘ be IIΘ [d] IIΘ be IЦΘ

Ш. [a] IШΘ be IƐΘ [b] IƐΘ be IПΘ [c] IПΘ be IƏΘ [d] IƏΘ be IГΘ

Ɛ.[a] IцП, IIШΘ [b] IIШΘ, IIƏΘ [c] IIПΘ, IIГΘ [d] IIƏΘ, IIГΘ

П. [a] ПцП, ПШΘ [b] ПШΘ, ППΘ [c] ППΘ, ПƏΘ [d] ПƏΘ, ПГΘ

Ə. [a] ƏцП, ƏШΘ [b] ƏШΘ, ƏПΘ [c] ƏПΘ, ƏƏΘ [d] ƏƏΘ, ƏГΘ

Г. [a] ʁƏΘ, ρƏΘ [b] ρƏΘ, IƏΘΘ [c] IƏΘΘ, IƏIΘ [d] IƏIΘ,IƏЦΘ

ʁ. [a] IШƏΘ,IƏЦΘ [b] IƐƏΘ, IПƏΘ [c] IПƏΘ, IƏƏΘ [d] IƏƏΘ IГƏΘ

ρ.[a] IцПƏ,IГƏΘ [b] IIШΘƏ, IIПΘƏ [c] IIПΘƏ,IIƏΘƏ [d] IIƏΘƏ, IIГΘƏ

IΘ. [a] цПШΘ,IГƏΘ [b] ШΘПΘ, IIПΘƏ [c] ПΘƏΘ,IIƏΘƏ [d] IПƏΘ, IƏƏΘ

A egi nana zhi zhe ke eda nya kpaku-bwadwa zhi na.

[Express each numbers as a product of their prime factors]

Eri [example] Ι. ƏΘ be ΙȣƏ, Ц. ΙȣƏ, be цƐ,

Ι.

Ц	ƏΘ	ΙȣƏ
Ц	ШΘ	ȣШ
Ш	ΙП	ȣШ
П	П	ШΙ
ШΙ	Ι	ШΙ
		Ι

Ц × Ц × Ш × П × ШΙ = ΙȣƏΘ

Ц.

Ц	ΙȣƏ	цƐ
Ц	ȣШ	Ιц
Ц	ШΙ	Ə
Ш	ШΙ	Ш
ШΙ	ШΙ	Ι
	Ι	

Ц × Ц × Ц × Ш × ШΙ = ГƐƐ

Etun **Гρ** [exercise 79]

Ι. [a] цП,ШΘ, ШΘ [b] ШΘ be ПΘ [c] ПΘ be ƏΘ [d] ƏΘ be ГΘ

Ц. [a] ȣΘ be ρΘ [b] ρΘ be ΙΘΘ [c] ΙΘΘ be ΙΙΘ [d] ΙΙΘ be ΙЦΘ

Ш. [a] ΙШΘ be ΙƐΘ [b] ΙƐΘ be ΙПΘ [c] ΙПΘ be ΙƏΘ [d] ΙƏΘ be ΙГΘ

Ɛ.[a] ΙцП, ΙΙШ,ШΘ [b] ΙΙШ,ΙΙƏ,ШΘ [c] ΙΙПΘ,ΙΙГ, ШΘ [d] ΙΙƏΘ, ΙΙГΘ, ШΘ

П. [a] ПцП, ПШ, ПΘ [b] ПШΘ, ППΘ, ПΘ [c] ПП, ПƏΘ ПΘ

Ə. [a] ƏцП, ƏШΘ, ƏΘ [b] ƏШΘ, ƏПΘ, ƏΘ [c] ƏПΘ, ƏƏΘ, ƏΘ

Г. [a] ȣƏΘ, ρƏΘ, ГΘ [b] ρƏΘ, ΙƏΘΘ, ГΘ [c] ΙƏΘΘ, ΙƏΙΘ, ГΘ

ȣ. [a] ΙШƏΘ,ΙƏЦΘ, ΙЦΘ [b] ΙƐƏΘ, ΙПƏΘ, ΙЦΘ [c] ΙПƏΘ, ΙƏƏΘ, ΙЦΘ

ρ.[a] ΙцПƏ, ΙГƏΘ, ΙЦΘ [b] ΙΙШΘƏ, ΙΙПΘƏ, ΙЦΘ [c] ΙΙПΘƏ, ΙΙƏΘƏ, ΙЦΘ

ΙΘ. [a] цПШΘ, ΙГƏΘ, ППΘ [b] ШΘПΘ, ΙΙПΘƏ, ППΘ [c] ПΘƏΘ, ΙΙƏΘƏ, ППΘ

ρΙ

Jun ke a bedozhi na, bwadwa nyi

[Express as common factor]

Eri [example]

I. **Jin ШƏӨ ke a bedozhi na, bwadwa nyi**

[Express 360 as common factor]

I × ШƏӨ = ШƏӨ

ц × IʁӨ = ШƏӨ

Ш × IцӨ = ШƏӨ

Ɛ × ρӨ = ШƏӨ

П × Гц = ШƏӨ

Ə × ƏӨ = ШƏӨ

I, ц, Ш, Ɛ, П, Ə, ʁ, ρ, IӨ, Iц, IП, Iʁ, цӨ, цƐ, ШӨ, ШƏ, ƐӨ, ƐП, ƏӨ, Гц, ρӨ, IцӨ, IʁӨ, be ШƏӨ.

ʁ × ƐП = ШƏӨ

ρ × ƐӨ = ШƏӨ

IӨ × ШƏ = ШƏӨ

Iц × ШӨ = ШƏӨ

IП × цƐ = ШƏӨ

Iʁ × цӨ = ШƏӨ

Ц. **Jin ƐП ke a bedozhi bwadwagi nyi na**

[express 45 as common factor]

I × ƐП = ƐП

Ш × IП = ƐП

П × ρ = ƐП

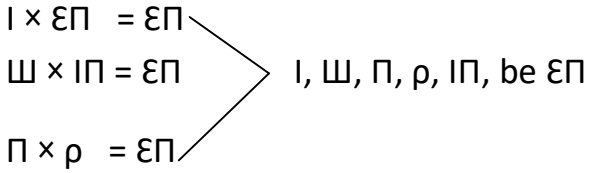
I, Ш, П, ρ, IП, be ƐП

Jin u ke a bedozhi na, bwadwa nyi

[Express as common factor]

Eri [example]

Jin ƐП ke a bedozhi bwadwagi nyi na *[express 45 as common factor]*



Etun ʁ**Ө** A [exercise 80]

I. [a] цП [b] ШӨ [c] ПӨ [d] ӘӨ [e] ГӨ

Ц. [a] ʁӨ [b] ρӨ [c] IӨӨ [d] IIӨ [e] IЦӨ

Ш. [a] IШӨ [b] IƐӨ [c] IПӨ [d] IӘӨ [e] IГӨ

Ɛ.[a] IцП [b] IIШӨ [c] IIПӨ [d] IIӘӨ [e] IIГӨ

П. [a] ПцП [b] ПШӨ [c] ППӨ [d] ПӘӨ [e] ПГӨ

Ә. [a] ПцПӨӨ [b] ПШӨӨӨ [c] ППӨӨӨ [d] ПӨӨӨӨ

Etun ʁ**Ө**B [exercise 80]

I. [a] ӘцП [b] ӘШӨ [c] ӘПӨ [d] ӘӘӨ [e] ӘГӨ

Ц. [a] ʁӘӨ [b] ρӘӨ [c] IӘӨӨ [d] IӘIӨ [e] IӘЦӨ

Ш. [a] IШӘӨ [b] IƐӘӨ [c] IПӘӨ [d] IӘӘӨ [e] IГӘӨ

Ɛ.[a] IцПӘ [b] IIШӨӘ [c] IIПӨӘ [d] IIӘӨӘ [e] IIГӨӘ

П. [a] ПцПӨ [b] ПШӨӨ [c] ППӨӨ [d] ПӘӨӨ [e] ПГӨӨ

Ә. [a] ПцПӨӨ [b] ПШӨӨӨ [c] ППӨӨӨ [d] ПӨӨӨ

РШ

Etizogi, Bedozhi, Bwadwa [Highest Common Factor]

EBB [HCF]

Ezo Bedozhi Bwadwa; **Egi guba lo yegboro gade bwadwa nyirinni** [if two or more numbers have the same factor]

Eri [example]

I. ƏΘ be IȣƏ, Ц. IȣƏ, be цƐ,

I.

Ц	ƏΘ	IȣƏ
Ц	ШΘ	ȣШ
Ш	IП	ȣШ
П	П	ШI
ШI	I	ШI
		I

Ц.

Ц	IȣƏ	цƐ
Ц	ȣШ	Iц
Ц	ШI	Ə
Ш	ШI	Ш
ШI	ШI	I
	I	

Ц × Ц × Ш × П × ШI = IȣƏΘ Ц × Ц × Ц × Ш × ШI = ГƐƐ

EBB [HCF] = Ш

Etun ȣ**I** [exercise 81]

I. [a] цП,ШΘ, ШΘ [b] ШΘ be ПΘ [c] ПΘ be ƏΘ [d]ƏΘ be ГΘ

Ц. [a] ȣΘ be ρΘ [b] ρΘ be IΘΘ [c] IΘΘ be IIΘ [d]IIΘ be IЦΘ

Ш. [a] IШΘ be IƐΘ [b] IƐΘ be IПΘ [c] IПΘ be IƏΘ [d]IƏΘ be IГΘ

Ɛ.[a] IцП, IIШ,ШΘ [b] IIШ,IIƏ,ШΘ [c]IIПΘ,IIГ, ШΘ [d]IIƏΘ, IIГΘ, ШΘ

П. [a] ПцП, ПШ, ПΘ [b] ПШΘ, ППΘ, ПΘ [c] ПП, ПƏΘ ПΘ

Ə. [a] ƏцП, ƏШΘ, ƏΘ [b] ƏШΘ, ƏПΘ, ƏΘ [c] ƏПΘ, ƏƏΘ, ƏΘ

Г. [a] ȣƏΘ, ρƏΘ, ГΘ [b] ρƏΘ, IƏΘΘ, ГΘ [c] IƏΘΘ, IƏIΘ, ГΘ

ȣ. [a] IШƏΘ,IƏЦΘ, IЦΘ [b] IƐƏΘ, IПƏΘ, IЦΘ [c] IПƏΘ, IƏƏΘ, IЦΘ

Etizogi, Bedozhi, Bwadwa [Highest Common Factor]

EBB [HCF]

Eri [example]

Wa egi nazhi ga ya wo e egi nyiri nini na za eti *'etizo, bedozhi, bwadwa'* za.

[Find the number that can take an exact number of times in highest, common and factor].

I. ШƏΘ, ц. ΠΘƐ

I. ШƏΘ = ц × ц × ц × Ш × Ш × П = $ц^{Ш} \times Ш^{ц} \times П^{I}$

ц. ΠΘƐ = ц × ц × ц × Ш × Ш × П = $ц^{Ш} \times Ш^{ц} \times Г^{I}$

Etun ʁ**ц** [exercise 82]

I. [a] цП be ШΘ [b] ШΘ be ΠΘ [c] ΠΘ be ƏΘ [d] ƏΘ be ГΘ

Ц. [a] ʁΘ be ρΘ [b] ρΘ be IΘΘ [c] IΘΘ be IIΘ [d] IIΘ be IЦΘ

Ш. [a] IШΘ be IƐΘ [b] IƐΘ be IΠΘ [c] IΠΘ be IƏΘ [d] IƏΘ be IГΘ

Ɛ.[a] IцП, IIШΘ [b] IIШΘ, IIƏΘ [c] IIΠΘ, IIГΘ [d] IIƏΘ, IIГΘ

П. [a] ПцП, ПШΘ [b] ПШΘ, ППΘ [c] ППΘ, ПƏΘ [d] ПƏΘ, ПГΘ

Ə. [a] ƏцП, ƏШΘ [b] ƏШΘ, ƏПΘ [c] ƏПΘ, ƏƏΘ [d] ƏƏΘ, ƏГΘ

Г. [a] ʁƏΘ, ρƏΘ [b] ρƏΘ, IƏΘΘ [c] IƏΘΘ, IƏIΘ [d] IƏIΘ, IƏЦΘ

ʁ. [a] IШƏΘ,IƏЦΘ [b] IƐƏΘ, IΠƏΘ [c] IΠƏΘ, IƏƏΘ [d] IƏƏΘ IГƏΘ

ρ.[a] IцПƏ,IГƏΘ [b] IIШΘƏ, IIΠΘƏ [c] IIΠΘƏ,IIƏΘƏ [d]IIƏΘƏ, IIГΘƏ

IΘ. [a] цПШΘ,IГƏΘ [b] ШΘПΘ, IIΠΘƏ [c]ΠΘƏΘ,IIƏΘƏ [d] ƏΘГΘ,IIГΘƏ

II. [a] цПШ, ШШΘ [b] ШПΘ, ШΘП [c] ПΘ be ƏΘ [d] ƏΘ be ГΘ

IЦ. [a] ʁΘ be ρΘ [b] ρΘ be IΘΘ, ПΘ [c] IΘΘ be IIΘ [d] IIΘ be IЦΘ

IШ. [a]IШΘ, ПΘ, IƐΘ [b] IƐΘ be IΠΘ [c] IΠΘ be IƏΘ [d] IƏΘ be IГΘ

ρП

Ekpetso *[fraction]*

Ekpetso *[fraction];* **Wun yi egi nazhi takedozhi wunci tati dozhi o** *[is parts of whole expression place on the top of one another]*

Mini gaba ekpetso zhi o *[parts of fraction]*

I. **Egifin** ***[****numerator];* **Fiti bo egizhi a jin ata o** *[it's placed on top]*

Ц. **Egikin** *[denominator];* **Kin bo egizhi a jin aci o** *[it's placed under]*

Eri [example]

$\frac{\text{I}}{\text{ц}}$ $\frac{\text{Ш}}{\text{П}}$ $\frac{\text{IӨ}}{\text{IӨӨ}}$ ——— $\frac{\textbf{Egifin}\ [numerator]}{\textbf{Egikin}[denominator]}$

Ekpetso a gan ekpa guta *[three types of fraction]*

I. **Wange-ekpetso** *[proper fraction]*

Ц. **Wunge-ekpetso a** *[improper fraction]*

Ш. **Gafi-ekpetso** *[mixed fraction]*

Eyezhi [definations]

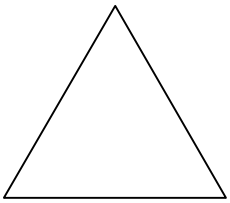
I. **Wange-ekpetso** *[proper fraction;* De egifin zhi na gbagba gan egi kin na*.[has the numerator less than the denominator]* $\frac{\text{I}}{\text{ц}}$ $\frac{\text{Ш}}{\text{П}}$ $\frac{\text{IӨ}}{\text{IӨӨ}}$

Ц. **Wunge-ekpetso a** *[improper fraction];* De egifin zhi nag an nya kin na. *[has the numerator greater than the denominator]* $\frac{\text{IӨ}}{\text{Ш}}$ $\frac{\text{П}}{\text{ц}}$

Ш. **Gafi-ekpetso** *[mixed fraction]*; Wunyi egi nazhi takedozhi be ekpetso e na. *[this consist of whole numbers and fraction]* $\text{П}\frac{\text{I}}{\text{ц}}$ $\text{П}\frac{\text{П}}{\text{ц}}$

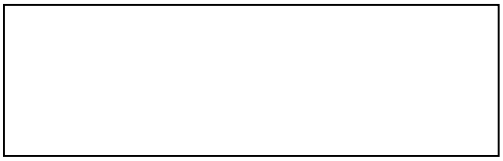
EBU / PEDZOZHI - SHAPES

1. Kpangwagi –Triangle

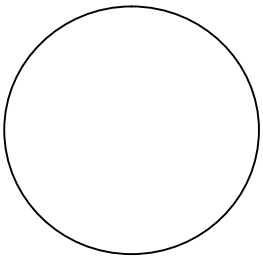


2. Patagi – Square

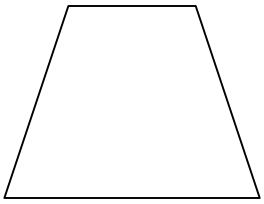
3. Patasoro – Rectangle



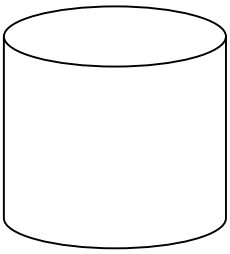
4. Kurugi – Circle



5. Porogi – Cone



6. Kpace – Cylinder



EMA EFIN/EKA - TIME MEASUREMENT

1. Baci shita yi gikagi nini - 60 seconds make one minute
2. Gikagi shita yi kakun nini - 60 minutes make one hour
3. Kakun eshi be gunni yi foe ni - 24 hours make one day
4. Fogutwaba yi gokati nini - 7 days make one week
5. Gokati gunni yi etswa nini - 4 weeks make one month
6. Gokati arata be guba e yi eya nini - 52 weeks make one year
7. Etswa guwo be guba e yi eya nini - 12 months make one year
8. Efo kpauba din rudin yi eya nini - 365 days make one year
9. Efo kpauba din rudin be nini e yi yifuru-eya - 366 days make one leap-year

ÈTÀZHI LINES

1.	Eta gbaro	Vertical line
2.	Eta ezun	Horizontal line
3.	Eta fyaragi/ganagi	Thin line
4.	Eta Tifa	Thickline
5.	Etacefi.	Zigzagline
6.	Etakadan	Curveline
7.	Ganga	Perpendicular line

KAMI NUPE		CALENDAR
1.	Kami	Calendar
2.	Efin	Watch/time
3.	Baci	Second
4.	Emitin	Minute
5.	Etsa	Hour
6.	Kpetso	Fraction
7.	Epe	Wide
8.	Ekpinlu	Heavy
9.	Pisugi	Short
10.	Eda	Multiplication
12.	Enyagan	Division
13.	Enya like	Subtraction
14.	Enya be	Addition
15.	Edo	Percentage

YEMA		LOGIC
1.	Eri	Example
2.	Ezhe	Solution
3.	Bwadwa	Factor
4.	Ekpetso	Fraction
5.	Ema	Measurement
6.	Daci	Simplification
7.	Egifitizhi	Indices
8.	Bepe	Expansion
9.	Egi-dunfe	Numberbase
10.	Kpaku-bwadwa	Primefactor
11.	Gbagbangi,bedozhi,edazhi	Lowest Common Multiple(LCM)
12.	Etizogi,bedozhi, bwadwa	Highestcommonfactor (HCF)

	ETSWAZHI	MONTHS
1.	Etswa Ninfu	January
2.	Etswa Bedzo-Gànì	February
3.	Etswa Gani	March
4.	Etswa Togayagi	April
5.	Etswa Togaya-Ebàci	May
6.	EtswaBedzoEmiwan-Ezagbakozhi	June
7.	Etswa Emiwan-Ezagbakozhi	July
8.	Etswa Bedzo-Emiwan	August
9.	Etswa Emiwan	September
10.	Etswa Sokowungi	October
11.	Etswa Sokowunkó	November
12.	Etswa Zogi	December

GANMI MANARAKIS MANARAKIS LAW

Eri - Eexample

$$\frac{\text{ІШ} + \text{Іц} + \text{П} - \text{Ш}}{\rho} =$$

$$\frac{\text{ШӨ} - \text{Ш}}{\rho} =$$

$$\frac{\text{цГ}}{\rho} =$$

$$= \text{Ш}$$

ІӨІ