

en(A)

Twelfth International Olympiad in Linguistics

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Individual Contest Solutions

Problem #1. Rules:

1. present: **no-**

2. object =

	singular	plural
1	<i>nV-</i>	<i>lV-</i>
2	<i>kV-</i>	<i>lenV-</i>

, ***V*** is the vowel from the following syllable

3.

	‘strike’	‘pierce’
present, subject = 1st	<i>ho-</i>	<i>fu-</i>
otherwise	<i>ha-</i>	<i>fi-</i>

4. future, subject = $\begin{cases} \text{1st : } & \textbf{\textit{lu-}} \\ \text{2nd : } & \textbf{\textit{la-}} \end{cases}$

5. subject = dual: **-i**

6.

	indicative	‘because ...’
subject = 1st person pl or 2nd person sg	<i>-ne</i>	<i>-tagihe</i>
otherwise	<i>-be</i>	<i>-nagihe</i>

Answers:

- (a) ***nonifibe*** you_{pl} are piercing me
halu'ibe we both will strike him
lifilatagihe because you_{sg} will pierce us
nokufune we are piercing you_{sg}
nolahanagihe because you_{pl} are striking us
- (b) ***noha'ibe*** you both are striking him
kifilune we will pierce you_{sg}
nolenohotagihe because we are striking you_{pl}
filanagihe because you_{pl} will pierce him

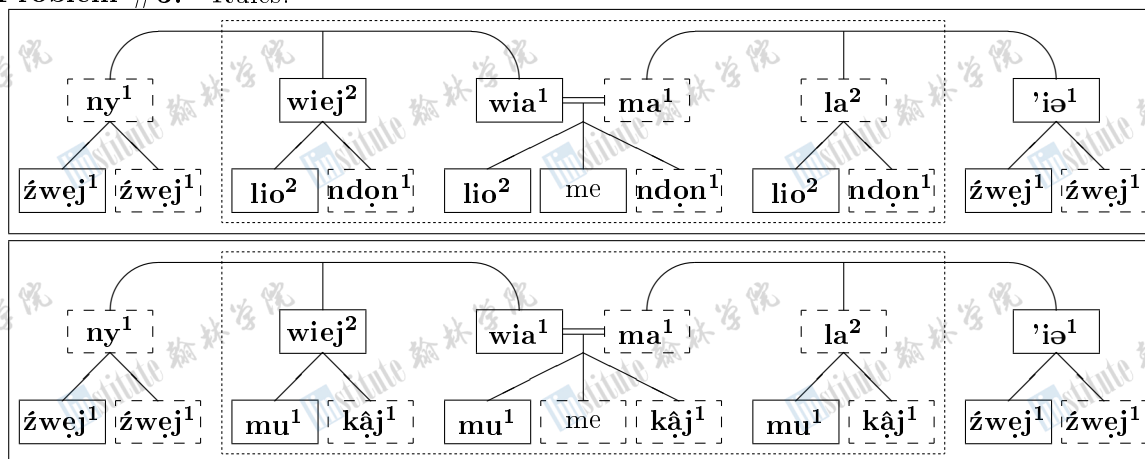
Problem #2. Rules:

	singular	dual	plural
people, animals, tools	-∅		-gɔ
	-n		-dɔ
fruit	-gɔ	-∅	-gɔ
	-dɔ	-n	-dɔ
all other things	-dɔ		-(n)

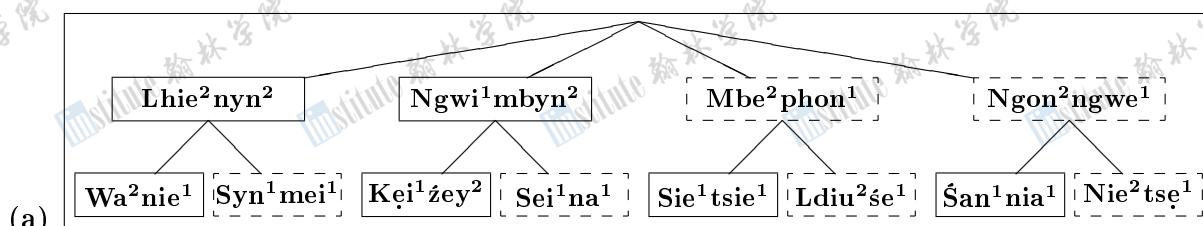
Answers:

singular	dual	plural	
alɔsɔhjɛɔ	alɔsɔhje	alɔsɔhjɛɔ	plum
tsegun	tsegun	tsegudɔ	dog
alɔguk'ogo	alɔguk'o	alɔguk'ogo	lemon
k'ap ^h t ^h ɔ	k'ap ^h t ^h ɔ	k'ap ^h t ^h ɔgɔ	old man
k ^h ɔdɔ	k ^h ɔ	k ^h ɔ	blanket
k'ɔdɔ	k'ɔn	k'ɔdɔ	tomato
alɔgɔ	alɔ	alɔgɔ	apple
p ^h ɔ	p ^h ɔ	p ^h ɔgɔ	buffalo
san	san	sadɔ	child
ɔlsun	ɔlsun	ɔlsudɔ	comb
pitso	pitso	pitsogɔ	fork
t ^h ɔp ^h paadɔ	t ^h ɔp ^h paa	t ^h ɔp ^h paa	chair

Problem #3. Rules:



($\triangle$ = man, $\circ$ = woman)



(a)

(b) Nie^2tse^1 Sie^1tsie^1 $'yn^1$ $ndɔn^1$ ngu^2 .

Problem #4. Rules:

- Word order:



- N A D $(N = \text{noun}; A = \text{adjective}; D = \text{demonstrative adjective})$

- Choice of pronoun (S_2):

$$S_1 = S_2 \Rightarrow S_2 = \grave{o}k\grave{i}; S_1 \neq S_2 \Rightarrow S_2 = o$$

- Vowel lowering: $(\grave{W} = \text{word with lowered vowels}; W = \text{word without lowered vowels})$

$$\begin{aligned} \dots o \grave{W} \dots &> \dots \grave{o} \grave{W} \dots & \dots \grave{W} \grave{a}no \dots &> \dots \grave{W} \grave{a}no \dots \\ \dots o W \dots &> \dots o W \dots & \dots W \grave{a}no \dots &> \dots W \grave{a}no \dots \end{aligned}$$

- Tone changes: $(\grave{J} = \text{word boundary}; A = \text{adjective}; V \text{ is a vowel}; C \text{ is a consonant})$

– caused by adjectives: $\dots V] A > \dots \grave{V}] A$

– caused by verb forms:

- * affirmative form, past: $\dots \grave{V}] [CV(C)V\grave{C}V]_{\text{verb}}$
- * affirmative form, future: $\dots V] [C\acute{V}(C)V\grave{C}V]_{\text{verb}}$
- * negative form:¹ $\dots \grave{V}] [CV(C)V\grave{C}V]_{\text{verb}}$

Answers:

- (a) 8. Did this man frighten the thief?
The girl said that he_{this man} did frighten the thief.
9. Will the deceived girl kill this youth?
The deceived girl said that she_{the deceived girl} would kill this youth.
10. This thief said that the child did not heal the man. *or*
This thief said that the child would not heal the man.
- (b) 11. *okàa kḡnonò ȁmodhyòmú kofilomù ânò à?*
ȁmò wei ga ȑ kḡnono ȁmodhyòmú kofilomù ânò.
12. *ȁvùrànú nȁamù ȁnó nwȁsese edèi à?*
ȁvùrànú nȁamù ȁnò wei ga òkḡ nwȁsese edèi.
- (c) Nouns are not affected by any grammatical tone changes when placed at the very end of the sentence, before $\grave{a}$ or before $\grave{a}no$. Because of this, the base form for ‘thief’ is *ozyi* (7.), and the base form for ‘girl’ is *amemùrè* (2.).

¹Usually has negative past interpretation, but can denote negative future if the surrounding context requires it.

Problem #5. body part – **wí** ‘human’ = spatial preposition:

sèè	(liver)	at the center
yík	(face)	at the surface
zù	(head)	above, on

Answers:

- | | | | |
|-----|---------------|-------------------------------|-------------------|
| (a) | ǎá | (to put) | to put |
| | ǎá náng nú kò | (to put + foot + edge + hole) | to be dying |
| | ǎá sèè | (to put + liver) | to envy |
| | búmá yík | (hair + eyes) | eyelash |
| | búmá zù yík | (hair + above, on + eyes) | eyebrow |
| | dáng gòk | (bad + snake) | poisonous snake |
| | dí fò | (good + field) | good field |
| | dí sèè | (good + liver) | happiness |
| | kò yík | (hole + eyes) | eye socket |
| | kò zòk | (hole + nose) | nostril |
| | náng wí | (foot + human) | foot |
| | nú fò | (edge + field) | field edge |
| | nú lébé | (edge + tongue) | tip of the tongue |
| | sèè wí | (liver + human) | liver |
| | yík | (face) | at the surface |
| | yík wí | (face/eyes + human) | face/eyes |
| | zù | (head) | above, on |
-
- | | | | |
|-----|----------|------------------|--------------------|
| (b) | búmá zù | (hair + head) | hair (on the head) |
| | kò | (hole) | hole |
| | lébé gòk | (tongue + snake) | snake’s tongue |
| | lébé wí | (tongue + human) | tongue |
-
- | | | | |
|-----|----------|----------------|---------------|
| (c) | sèè | (liver) | at the center |
| | zù wí | (head + human) | head |
| | dáng sèè | (bad + liver) | displeasure |
| | zòk wí | (nose + human) | nose |