

# Problem #3

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Kuria

Eimear McKnight  
(they/them)

## Graded by

- Boris Iomdin
- Ivan Derzhanski
- Jan Petr
- Myself

(With thanks to all those who helped translate solutions)

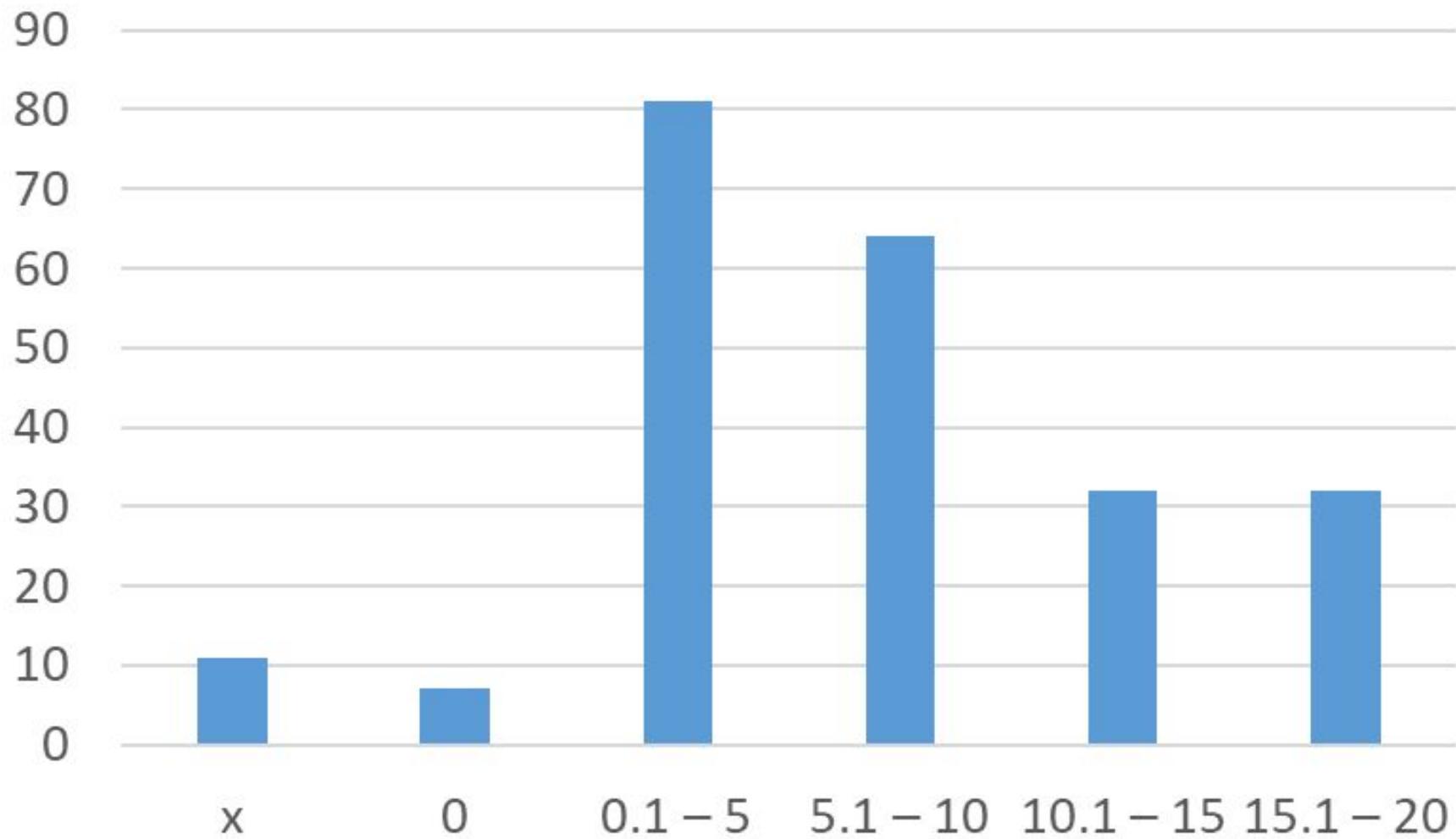


# Statistics

- 216 submitted solutions

# Statistics

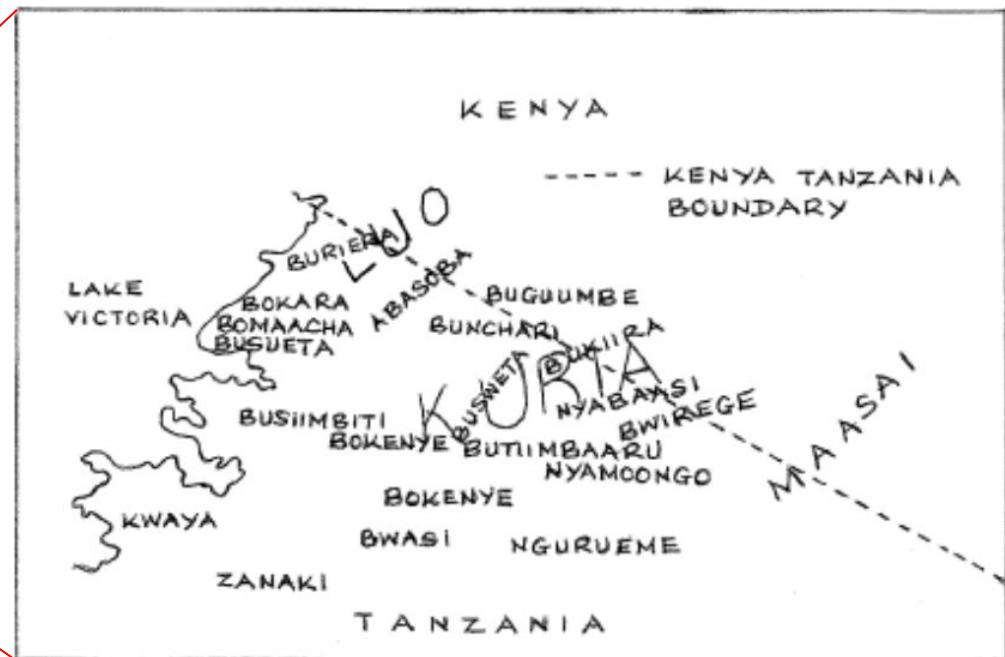
- 216 submitted solutions
- Mean score: 7.5



# Statistics

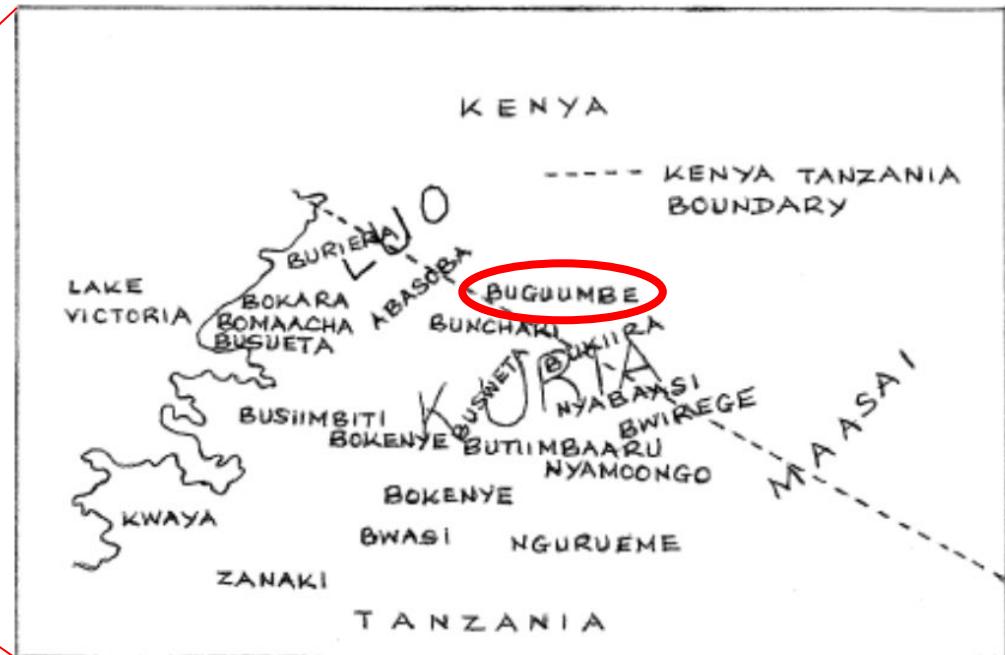
- 216 submitted solutions
- Mean score: 7.5
- Three contestants scored 20 points...

# Kuria



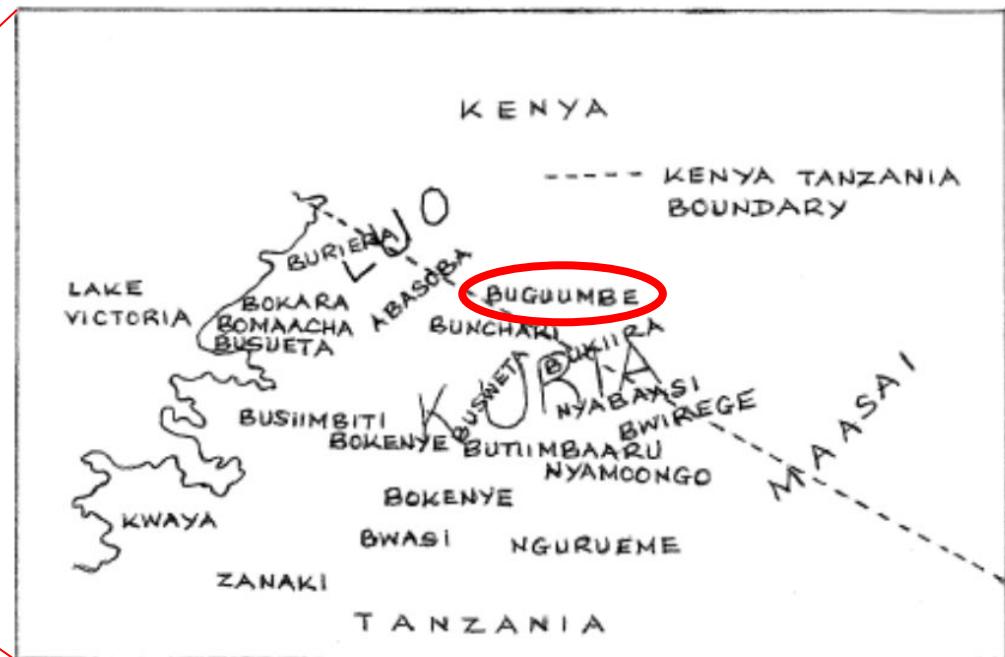
Map of the Kuria language area (Cammenga 1994)

# Kuria



Map of the Kuria language area (Cammenga 1994)

# Kuria



Map of the Kuria language area (Cammenga 1994)

# Kuria



Endonym: iŋikúryá

# Kuria



Endonym: iχikúryá

Speakers: aχakúryá

# Kuria



Endonym: iχikúryá

Speakers: aχakúryá

Atlantic-Congo



Bantu



“Eastern Bantu” (Zone E)



Kuria

# Kuria



Endonym: iŋikúryá

Speakers: aŋakúryá

Atlantic-Congo



Bantu



“Eastern Bantu” (Zone E)



Kuria

áβáánto

*Ich bin im Begriff, den Sekretär zu essen.*

*Ich bin im Begriff, den Sekretär zu essen.*

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## IOL Board

**PC/Jury Chair** 

- Tung-Le Pan (2025)



**Secretary to Problem Committee**

- Eimear McKnight







# Solution

# Verb morphology

# Verb morphology

I	he	we	they
nnaasyá	aaha	toraroma	mbaa□úna
ndasukură	aa□ină	toosaambá	□ahóótóótéra
ndasiitaáka	asáámba	tookoondókóra	
naaturuúnjána	naaryá	tora□iima	
ndaroma	aheetoka	torakoondokórá	
naarya			
ndarya			
ntúrúúnjáná			

# Verb morphology

I	he	we	they
nnaasyá	aaha	toraroma	mbaa□úna
ndasukură	aa□ină	toosaambá	□ahóótóótéra
ndasiitaáka	asáámba	tookoondókóra	
naaturuúñána	naaryá	tora□iima	
ndaroma	aheetoka	torakoondokórá	
naarya			
ndarya			
ntúrúúñáná			

**to** = we; **ba/□a** =

they

**n** = I? **a** = he?

# Verb morphology

Past (“He has given” etc.)		Present (“He burns” etc.)	Future (“I am about to eat” etc.)
aaha aa□ină nnaasyá mbaa□úna toosaambá	naaturuúŋjána tookoondókóra naarya naaryá	asáámba □ahóótóótéra ntúrúúŋjáná aheetoka	toraroma ndasukură ndasiitaáka ndaroma tora□iima ndarya torakoondokórá

**to** = we; **ba/□a** =  
they  
**n** = I? **a** = he?

# Verb morphology

Past (“He has given” etc.)		Present (“He burns” etc.)	Future (“I am about to eat” etc.)
aaha aa□ină nnaasyá mbaa□úna toosaambá	naaturuúñána too koondókóra naarya naaryá	asáámba □ahóótóótéra ntúrúúñáná aheetoka	toraroma nda sukură ndasiitaáka ndaroma tora□iima ndarya tora koondokórá

to = we; ba/□a =  
they  
n = I? a = he?

ra/da = future  
long vowel = past

# Verb morphology

“Indeed,...”

**nnaasyá**

*Indeed, I have ground (something).*

**mbaa□úna**

*Indeed, they have broken (something).*

**naaryá**

*Indeed, he has eaten the banana.*

**to** = we; **ba/□a** =  
they  
**n** = I? **a** = he?

**ra/da** = future  
long vowel = past

# Verb morphology

“Indeed,...”

**n**naasyá

**m**baa□úna

**n**aaryá

*Indeed, I have ground (something).*

*Indeed, they have broken (something).*

*Indeed, he has eaten the banana.*

**to** = we; **ba/□a** =  
they  
**n** = I? **a** = he?

**ra/da** = future  
long vowel = past

**n/m** = “Indeed”  
past tense only

# Verb morphology

Tense\Subject	I	he	we	they
Present	n-	a-	to-	<input type="checkbox"/> a-
Past	n-aa-	a-a-	to-o-	<input type="checkbox"/> a-a-
Past + “Indeed”	n-n-aa-	n-a-a-	n-to-o-	m-ba-a-
Future	n-da-	(unattested)	to-ra-	(unattested)

# Verb morphology

“Indeed”	Person	Tense		Stem
n	n a to $\square$ a	I he we they	ra V	future past

where V = previous vowel, and n-V- → naa

n +  $\square$  → mb

n + r → nd (see also ndóma ← n + róma)

# but what about tones



# Verb tonology

Present	Past	Future	
asáámba □ahóótóótéra ntúrúúŋjáná	aaha aa□ină nnaasyá mbaa□úna toosaambá	naaturuúŋjáná tookoonđokóra naarya naaryá	toraroma ndasukură ndasiitaáka ndaroma tora□iima ndarya torakoondokórá

# Verb tonology

Present	Past	Future	
asáámba □ahóótóótéra ntúrúúñáná	aaha aa□ină nnaasyá mbaa□úna toosaambá	naaturuúñána tookoondókóra naarya naaryá	toraroma ndasukură ndasiitaáka ndaroma tora□iima ndarya torakoondokórá

Present = high tone from first V of stem?

# Verb tonology

Present	Past	Future
a-sáámba □a-hóótóótéra n-túrúúñáná	aa-ha aa-□ină nnaa-syá mbaa-□úna too-saambá	naa-turuúñána too-koondókóra naa-rya naa-ryá
		tora-roma nda-sukură nda-siitaáka nda-roma tora-□iima nda-rya tora-koondokórá

Present = high tone from first V of stem?

# Verb tonology

Present	Past	Future
a-sáámba □a-hóótóótéra n-túrúúñáná	aa-ha aa-□ină nnaa-syá mbaa-□úna too-saambá	naa-turuúñána too-koondókóra naa-rya naa-ryá
		tora-roma nda-sukură nda-siitaáka nda-roma tora-□iima nda-rya tora-koondokórá

Present = high tone from first V of stem?

# Verb tonology

Present	Past+“indeed”	Past	Future
a-sáámba □a-hóótóótéra n-túrúúñáná	nnaa-syá mbaa-□úna naa-ryá	aa-ha aa-□ină naa-turuúñána too-koondókóra naa-rya too-saambá	tora-roma nda-sukură nda-siitaáka nda-roma tora-□iima nda-rya tora-koondokórá

Present, past + “indeed” = high tone from first V of stem?

# Verb tonology

Past

too-koondókóra  
naa-turuúŋjána

→ H from 3rd vowel of stem

Future

tora-koondokórá  
nda-siitaáka

→ H from 4th vowel of stem

# Verb tonology

Past

too-koondókór**a**  
naa-turuúñján**a**

→ H from 3rd vowel of stem

Future

tora-koondokór**á**  
nda-siitaák**a**

→ H from 4th vowel of stem

# Verb tonology

## Future

tora-roma

nda-sukur ā

nda-siitaáka

*We are about to bite (something).*

*I am about to rub (something).*

*I am about to accuse (someone).*

nda-roma iñíimbéyo

tora-□iima á□áánto

nda-rya iritáárákímúra

tora-koondokórá

áyáñú□a

*I am about to bite the seeds.*

*We are about to measure the people.*

*I am about to eat the secretary bird.*

*We are about to uncover the bottle.*

# Verb tonology

## Future

tora-roma

nda-sukur ā

nda-siitaáka

12 34

1 2 3 4

nda-roma iñíimbéyo

tora-□iima á□áánto

nda-rya iritáárákímúra

tora-koondokórá

áyáñú□a

*We are about to bite (something).*

*I am about to rub (something).*

*I am about to accuse (someone).*

*I am about to bite the seeds.*

*We are about to measure the people.*

*I am about to eat the secretary bird.*

*We are about to uncover the bottle.*

# Verb tonology

H from *n*th vowel of verb phrase (including object if it exists)

LL LH H...	L L L HH H H H H
nda-siitaáká	nda-rya iritáárákímúrá

Tense category	n
Present, past+“indeed”	1
Past	3
Future	4

# Verb tonology

## Future

tora-rom**a**

nda-sukur **ă**

nda-siitaáka

12 34

1 2 3 4

nda-roma iñíimbéyo

tora-□iima á□áánto

nda-rya iritáárákímúra

tora-koondokórá

áyáñú□a

*We are about to bite (something).*

*I am about to rub (something).*

*I am about to accuse (someone).*

*I am about to bite the seeds.*

*We are about to measure the people.*

*I am about to eat the secretary bird.*

*We are about to uncover the bottle.*

# Verb tonology

## Future

tora-rom**a**

nda-sukur ā

nda-siitaák**a**

12 34

1 2 3 4

nda-roma iʃíimbéy**o**

tora-◻iima á◻áánt**o**

nda-rya iritáárákímú**a**

tora-koondokórá

áɣáʃú◻**a**

*We are about to bite (something).*

*I am about to rub (something).*

*I am about to accuse (someone).*

*I am about to bite the seeds.*

*We are about to measure the people.*

*I am about to eat the secretary bird.*

*We are about to uncover the bottle.*

# Verb tonology

H from nth vowel of verb phrase (including object if it exists)

LL LH H...	L L L HH H H H H
nda- <b>s</b> iitaáká	nda- <b>r</b> ya iritáárákímúrá

If you run out of vowels:

L L L H ...	L L L H
X X	/
tora- <b>r</b> oma	nda- <b>s</b> ukură

# Verb tonology

Finally: phrase-final ...HH → LH

(N.B. final HH changes, not just final H, as naaryá keeps its final H)

ndasiitaáká



ndasiitaáka

ndarya iritáárákímúrá



ndarya iritáárákímúra

# Assignments

- (a) aheetoka *He remembers (something).*

Present tense, so H from first vowel of stem. Final HH → LH

→ **ahéétóka**

# Assignments

(b)

- |     |  |   |
|-----|--|---|
| 21. | <input type="checkbox"/> aasukurá<br><input type="checkbox"/> a-a-sukurá (n=3) | <b>They have rubbed (something).</b>    |
| 22. | toosya iſſíimbéyo<br>to-o-sya iſſíimbéyo (n=3)                                 | <b>We have ground the seeds.</b>        |
| 23. | ndóma<br>n-róma (n=1)  | <b>I bite (something).</b>              |
| 24. | naa <input type="checkbox"/> ína<br>n-a-a- <input type="checkbox"/> ína (n=1)  | <b>Indeed, he has sung (something).</b> |

# Assignments

(c)

25. We are about to eat the seeds.

**torarya iñíimbéyo**  
to-ra-rya iñíimbéyo (n=4)

26. I sing (something).

**mbína**  
n-□ína (n=1)

27. Indeed, we have measured the secretary bird.

**ntoo□íimá íritáárákímúra**  
n-to-o-□íimá íritáárákímúra (n=1)

28. We are about to burn (something).

**torasaambă**  
to-ra-saambă (n=4)

29. He has remembered (something).

**aaheetóka**  
a-a-heetóka (n=3)

# Sources

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# Best solution



# Leonard Kottisch

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Best Solution

Problem #3

Kuria