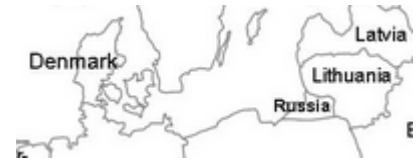


<1> Lithuanian road trip¹ (1/2)

Lithuanian is the official language of Lithuania, and is one of the surviving languages in the Baltic branch of the Indo-European family. As a result of its isolation, Lithuanian has retained many characteristics of the Indo-European ancestral language, making it particularly interesting for linguists.



Four Lithuanian friends, two women, Danute and Regina, and two men, Jokubas and Matis, are planning a trip. Here are some extracts from their conversation. Pay attention to the extra lines and dots above and below the letters – they matter!

Speaker	Lithuanian	English
Danute to Jokubas	Mes nórime gražos.	<i>We want some change.</i>
Jokubas to Danute	Aš nóriu žemėlapi.	<i>I want a map.</i>
Danute to Regina	Jis skaīto.	<i>He's reading.</i>
Jokubas to Matis	Ar tu turi gražos?	<i>Do you have some change?</i>
Matis to Jokubas	Aš neturiu gražos.	<i>I don't have any change.</i>
Matis to the others	Jūs einate.	<i>You're going.</i>
Regina to the others	Mes turime gražos.	<i>We have some change.</i>
Matis to Regina	Tu turi dviratį.	<i>You have a bike.</i>
Matis to the others	Regina turi dviratį.	<i>Regina has a bike.</i>
Jokubas to Danute	Skaītyk žemėlapi.	<i>Read the map!</i>
Danute to Matis and Regina	Jūs neskaītote žemėlapi.	<i>You aren't reading the map.</i>
Matis and Regina to Danute.	Mes einame.	<i>We're going.</i>

¹ Created by Babette Newsome and revised by Dick Hudson.

<1> Lithuanian road trip (2/2)

12 pts

Your task:

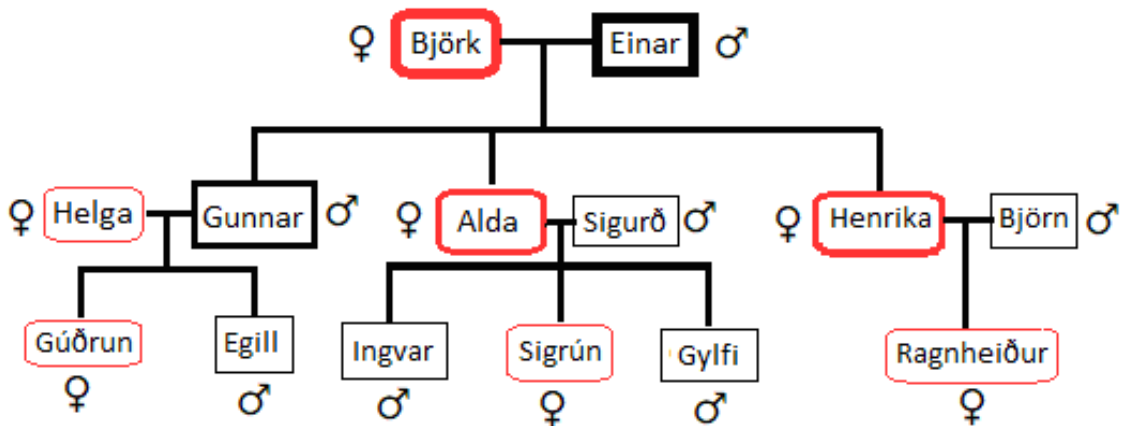
From the conversation, work out how to translate these English sentences into Lithuanian. Once again, make sure you pay attention to the extra lines and dots above and below the letters. Fill in all of the empty cells in the rightmost column of the table below.

1.	to Danute and Jokubas	<i>Do you have a bike?</i>	Ar jūs turite dviračių?	1.5
2.	to Jokubas and Matis	<i>You're not reading.</i>	Jūs neskaitytote.	1.5
3.	to Jokubas	<i>You are going.</i>	Tu eina.	1.5
4.		<i>Is Matis going?</i>	Ar Matis eina?	1.5
5.		<i>We don't want any change.</i>	Mes nenorime gražos.	1.5
6.	Jokubas to the others	<i>You don't have any change.</i>	Jūs neturite gražos.	1.5
7.		<i>Don't I have a bike?</i>	Ar aš neturiu dviračių.	1.5
8.		<i>I don't want a map.</i>	Aš nenoriu žemėlapių.	1.5

<2> Icelandic Relations² (1/2)

According to Icelandic writer and translator Alda Sigmundsdóttir “Icelanders tend to be fanatically precise when it comes to describing family connections”.

Grandparents Björk and Einar have three adult children, Gunnar, Alda and Henrika, who in turn are married with children. Here is their family tree: Björk and Einar’s children are in a bold textboxes with their spouses marked with lighter boxes; males are shown in black square boxes accompanied by the ♂ symbol, while females are in rounded red boxes accompanied by the ♀ symbol . The letter ð is pronounced like the ‘th’ in English “brother”.



Here are some statements that apply to the family shown in the family tree above.

<i>Alda er föðursystir Gúðrunur.</i>	<i>Egill er bróðursonur Henrikar.</i>
<i>Gúðrun er systir Egills.</i>	<i>Alda er frænka Egills og Gúðrunur.</i>
<i>Egill er bróðir Gúðrunur.</i>	<i>Gunar er frændi Sigrúnur.</i>
<i>Gunnar er faðir Gúðrunur.</i>	<i>Egill er frændi Aldar.</i>
<i>Gúðrun er bróðurdóttir Aldar.</i>	<i>Gúðrun og Helga eru mæðgur.</i>
<i>Sigurð er eiginmaður Aldar.</i>	<i>Alda, Henrika og Björk eru mæðgur.</i>
<i>Egill er sonarsonur Björkur.</i>	<i>Egill er bróðursonur Henrikar.</i>
<i>Egill og Gunnar eru feðgar.</i>	<i>Gúðrun og Gunnar eru feðgin.</i>
<i>Helga og Egill eru mæðgin.</i>	<i>Henrika er kona Björns.</i>
<i>Helga er móðurbróður kona Ragnheiðurs.</i>	<i>Gúðrun er frænka Ragnheiðurs</i>

² Created by Babette Newsome (NACLO) and revised by Richard Hudson (UKLO).

<2> Icelandic Relations (2/2) 16pts

Task 1. Complete the following sentences with the appropriate Icelandic relationship word.
10pts

1. Ingvar er	bróðir	Sigrúnur.	1
2. Ingvar er	dóttursonur	Einars.	1
3. Egill er	bróðursonur	Aldar.	1
4. Egill er	frændi	Aldar.	1
5. Sigrún er	dótturdóttir	Einars.	1
6. Henrika er	móðursystir	Sigrúnur.	1
7. Henrika er	frænka	Sigrúnur.	1
8. Gúðrun er	sonurdóttir	Björkur.	1
9. Sigurð er	föðursystur eiginmaður	Gúðrunur.	1
10. Ingvar, Gylfi og Alda eru	mæðgin		1

Task 2. As it happens, Helga has a sister, Jóhanna, and a brother, Magnus. Jóhanna is married to Jóhannes. In Icelandic, this means that:

Magnus er mágur Gunnars.

Jóhanna er mágkona Gunnars.

Jóhannes er svilar Gunnars.

You meet Magda and she describes herself thus: “Ég er svilkona Gunnars.” Explain in English what Magda’s relationship to Gunnar is, by completing this sentence:

*Magda is Gunnar's wife's **brother's** wife.* 0.5

Task 3. If you know that “Björk er tengdamaðir Helgar”, complete these statements:

1. Einar er **tengdafaðir** Helgar. 1
2. Björn er **svilar** Helgar. 1
3. Björn er **föðursystur eiginmaður** Gúðrunur. 2

Task 4. Gunnar's full name is Gunnar Einarsson, but Alda’s and Henrika’s last name is Einarasdóttir. What are Gúðrun’s, Egill’s and Gylfi’s full names? (Write each on a separate line.)

Gúðrun Gunnarsdóttir

Egill Gunnarsson

Gylfi Sigurðsson

3 x 0.5 = 1.5

<3>It's true: The truth about Chalcatongo Mixtec (1/2) 20 pts

Chalcatongo Mixtec is a language spoken by just under 6,000 people in Oaxaca State of South-Central Mexico. It is famous among linguists for its many unusual characteristics, but it is an endangered language, at risk of extinction.

Task 1: 7 points (7 x 1)

Here are some sentences in Chalcatongo Mixtec. Their English translations have been given in a random order - **except for the first example**. Match the remaining Chalcatongo Mixtec sentences to their English translations. Note: Chalcatongo Mixtec (when written in the Roman alphabet) has some letter symbols and accents that we do not use in English – these are not relevant for solving this problem.

	Chalcatongo Sentences:		English Translations:
1.	Nduča kaa ñíʔní.	a.	<i>The</i> (emphatic stress – “ <u>The / that water</u> ”) water is hot.
2.	Maria kúu ħ xasiʔi.	b.	Pedro is my child.
3.	Ñíʔní nduča.	c.	Juan is my husband.
4.	Juan kaa lúlí.	d.	Maria is a woman.
5.	Ndežu kaa žaʔu.	e.	The water is hot.
6.	Síʔi Maria.	f.	Maria is feminine.
7.	Juan kúu xažiirí.	g.	<u>The</u> (emphatic stress – “that”) food is expensive.
8.	Pedro kúu xalúlírí.	h.	<u>Juan</u> (stressed) is small / short.

1 = a	5 = g
2 = d	6 = f
3 = e	7 = c
4 = h	8 = b

Here are some words in Chalcatongo Mixtec. The English translation for each word is given in the table.

Chalcatongo	English translation
ndáa	true
kwáá	dark, night-like, blind
súčí	young
tûû	black
kuʔu	sick, ill
kŭnú	deep
ñíʔní	hot
kwaʔá	red
saʔma	clothes

<3>It's true: The truth about Chalcatongo Mixtec (2/2)

Task 2:

Translate these English words or sentences into Chalcatongo Mixtec: 13 pts

a.	depth = xakŭnú	1
b.	heat = xañí?ní	1
c.	Maria [unstressed] is ill = Ku?u Maria.	1
d.	<i>Pedro</i> [stressed] is blind. = Pedro kaa kwáá.	1
e.	The clothes [unstressed] are red. = Kwa?á sa?ma.	1
f.	(It)* is true [emphatic as in “ <i>It/This</i> is true”]. = Kaa ndáa.	1
g.	(It)* is true. = Ndáa.	1
h.	Pedro is a blind person. = Pedro kúu ñ xakwáá.	1.5
i.	My clothes are the black ones. = Sa?marí kúu xatûû.	1.5
j.	My child is a young person. = Xalúlíri kúu ñ xasúçi.	1.5
k.	(It)* is the truth. = Kúu xandáa.	1.5

NOTE: *There is no equivalent in Chalcatongo Mixtec of the English “it” in sentences i-k.

<4> Oh the Places You'll Go and People You'll Meet in Sri Lanka³ (1/2)

Your job at the Department of Foreign Affairs and Trade (DFAT) is to educate people about the places and people (named entities) in Sri Lanka. You know enough of the Sinhala language to recognize a named entity but you still need to differentiate between what is a place and what is a person. You clipped the following from a Sri Lankan newspaper and identified eight instances of named entities by putting parentheses around them.

- instance 1: (කොළඹ දිස්ත්‍රික්කයේ) ජීවත්
koḷaṁba distrikkayē jīvat
- instance 2: සමහර විට (සිරිසේන මහත්මිය) ඔවුන් හමුවෙයි
samahara viṭa sirisēna mahatmiya ovun hamuveyi
- instance 3: (ගුණරත්න මහතා) ඔක්කොම කෑවේ
guṇaratna mahatā okkoma kṣēvē
- instance 4: පසුගිය සතියේ (දෙහිවල ගල්කිස්ස බලා) පියාසර කළේය
pasugiya satiyē dehivala galkissa balā piyāsara kaḷēya
- instance 5: (වීරරත්න මහතා) ඔවුන් හමුවෙයි
vīratna mahatā ovun hamuveyi
- instance 6: තවමත් (ශ්‍රී ජයවර්ධනපුර කෝට්ටේ) ජීවත්
tavamat śrī jayavardhanapura kōṭṭē jīvat
- instance 7: (වීරරත්න මහත්මිය) ඇපල් ගෙඩි කෑවා
vīratna mahatmiya āpal geḍi kṣāvā
- instance 8: (ශ්‍රී ජයවර්ධනපුර කෝට්ටේ) බලා පියාසර කළේය
śrī jayavardhanapura kōṭṭē balā piyāsara kaḷēya

³ Created by Ali Sharman (UKLO).

<4> Oh the Places You'll Go and People You'll Meet in Sri Lanka (2/2) 11 points

You then input the information into a database with the structure:

instance: named-entity, context, label.

Named Entity Recognition Database

- | |
|--|
| 1: කොළඹ දිස්ත්‍රික්කයේ, ජීවත්, <u>PLACE</u> |
| 2: සිරිසේන මහත්මිය, සමහර විට... ඔවුන් හමුවෙයි, <u>PERSON</u> |
| 3: ගුණරත්න මහතා, ඔක්කොම කෑවේ, <u>PERSON</u> |
| 4: දෙහිවල ගල්කිස්ස බලා, දෙහිවල ගල්කිස්ස බලා... පියාසර කළේය, <u>PLACE</u> |
| 5: වීරරත්න මහතා, ඔවුන් හමුවෙයි, <u>PERSON</u> |
| 6: ශ්‍රී ජයවර්ධනපුර කෝට්ටේ, තවමත්... ජීවත්, <u>PLACE</u> |
| 7: වීරරත්න මහත්මිය, ඇපල් ගෙඩි කෑවා, <u>PERSON</u> |
| 8: ශ්‍රී ජයවර්ධනපුර කෝට්ටේ, බලා පියාසර කළේය, <u>PLACE</u> |

1. Fill in the remaining labels in the database above by identifying the named entities as either PLACE or PERSON. (6 x 1.5) = 9pts
2. සිරිසේන මහත්මිය and සිරිසේන මහතා are the parents of වීරරත්න මහත්මිය. In what instance(s) between 1 and 8 does the husband of වීරරත්න මහත්මිය appear? 5
= 2 points

<5> Kaytetye kinship for you, us and them⁴ (1/2) 22pts

The Kaytetye language is spoken in Northern Australia around Barrow Creek in the Northern Territory by a dwindling number of speakers – only 145 were counted in 2006. This problem focuses on the language’s treatment of family relationships. Its pronouns distinguish singular (one person), dual (two people) and plural (more than two), and, as in English, three persons (first: *I/we*; second: *you*; third: *he/she/it/they*). Unlike English, however, the dual and plural pronouns, which refer to a pair or a group of people, also show how they are related to each other. (Every group is assumed to consist of family members.) For instance, the pronoun *ayleme* refers to a pair of people which includes the speaker, so we could translate it as ‘we two’; but these two people must be related according to precise rules which would allow one of them to be the other’s brother (for example) but not the other’s father. The rules only allow a single pronoun choice for any given pair or group of people.

To help in talking about these relationships, we can call one member X, where X may be the speaker or the addressee (the person addressed), but need not be. This allows us to define the relationship of the other person to X, so *ayleme* means ‘a pair of people including the speaker and X’s ...’ (where the dots allow ‘brother’ among many other possibilities). This classification yields nine dual pronouns, distinguished by three persons and three relationship-types.

Task 1: Fill the empty cells (A-G) in the following table of forms and relationships. Most of the forms are built regularly. (7 x 2) 14 pts

form	person	relationship
ayleme	1	X’s sister
aylake	1	X’s father
A aylanthe	1	X’s mother
elweme	3	X’s father’s father
mpwele	2	X’s father’s father’s brother’s son’s daughter
B elwake	3	X’s father
mpwelake	C 2	X’s daughter (where X is a man)
mpwele	2	X’s sister
elwanthe	3	X’s mother
D mpwelanthe	2	X’s spouse
ayleme	1	X’s father’s father’s sister
elwanthe	3	X’s spouse
aylake	1	X’s father’s brother
E elwake	3	X’s father’s father’s father
elwanthe	3	X’s spouse’s brother’s spouse’s sister
F ayleme	1	X’s father’s brother’s son’s son’s daughter
G mpwelake	2	X’s father’s mother’s brother
elwanthe	3	Unknown relationship to X

⁴ Created by Harold Koch and revised by Dick Hudson

<5> Kaytetye Kinship for you, us and them (2/2)

Task 2: Plural pronouns follow similar rules. Fill gaps H-J in the next table. (3 x 2) = 6pts

form	person	relationship
aynangke	1	X's brother's son's son
atake	3	X's father's sister
H atangke	3	X's father's father's father's father
atanthe	3	X's mother
I aynake	1	X's daughter (where X is a man)
errwangke	2	X's sister
J aynanthe	1	X's spouse's sister
errwake	2	X's father's brother

Task 3: 2pts

Here are a bunch of features (or elements) of meaning that are expressed by parts of these Kaytetye pronouns:

Abbreviation	Relation type	Explanation
P	paternal	related via father
M	maternal	related via mother
E	even	even generation distance between X and X's ...
O	odd	odd generation distance between X and X's ...

1. Which of these meaning elements (P M E O) is encoded by *-ake*? **P O (4 x 0.25) = 1pt**

2. Which of these elements is encoded by *-angke* on plural pronouns? **P E (4 x 0.25) = 1pt**

(Note points also awarded for not selecting incorrect elements so P M O as an answer to 1 would get

0.75)

<6> English has cousins **19 pts**

Task 1. **18x0.5 = 9pts**

Proto-Germanic	English	German	Icelandic
*p	p	pf	p
*z	-	-	r
*s	s	sch	s
þ	th	d /D	þ
*ð	d	t	ð
*r	r	r	r

Allow German d, D or d/D

Task 2. **10 pts**

Proto-Germanic	English	German	Icelandic
krampaz	cramp	Krampf	krampa
aplū	apple	Apfel or Apfle	epli
swanaz	swan	Schwan	svanur
þrīz	three	drei	þrír
swīnan	swine	Schwein	svín
jæran	year	Jahr	ári
þūman	thumb	Daumen	þumalfinger
þurnuz	thorn	Dorn	þyrnir
wurðan	word	Wort	orð
swerðan	sword	Schwert	sverð

Allow *Apfel* (actual German) or *Apfle* as not enough data to decide.

(10 x 1)