Contest Linguistics (US ILO team training)

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Given below are verb forms of the Georgian language and their unordered English translations. Match the Georgian verbs to English.

vtkvi, kenit, inadiret, itavmӡdomareve, vsadilobt, tkvi, vigoreb, vkeni, nadirob, visadileb, vinadire, ambob, vitavmӡdomareve, izamt, vivlit

you say, we dine, you hunt, I said, y'all did, I did, you said, I hunted, we will walk, I presided, I will roll, I will dine, y'all hunted, you presided, y'all will do.

0.1 Counting Problems

. . . Or, what do to when you see "*in random order.*" A common way to make a problem hard is to give unsorted data, which is usually sortable by counting frequencies. Such problems vary wildly in difficulty. Things to keep in mind on a hard problem:

1. If the problem has several independent-seeming dimensions, count the cases in each dimension as separately as you can. Bigger counts are easier to match up.

2. If your solution comes from that a distribution of observations in one language matches a distribution of observations in another, say that the entire distribution matches (e.g. "there are 7 'v-'s and 8 '∅'s, and 7 first person verbs and 8 second-person verbs. . . "), and that no other reasonable distribution in some other dimension matches (one obviously can't count every possible dimension, but this is often an easy way to fortify an explanation).

3. Problems sometimes contain more patterns than you can completely explain. After you've figured out one pattern, stop and see if it finishes the problem. (cf. ILO2007/3). Conversely, if you can't figure out one pattern, but there are others in the problem, try the others first: they might be enough. This applies to more than just counting problems.

0.2 Number Systems

1. Every number system that can precisely indicate large numbers is a base system. Don't waste time by abandoning them completely.

2. Numbers that are twice or half a power of the base are frequently special (e.g. 18 in Ndom, 10 (20) in some vicesimal (decimal) systems, 5 in Roman numerals). Also, numbers one or two less than a multiple of a base are sometimes formed by subtracting from a multiple of the base.

3. If you realize yourself trying anything weirder than the above (examples from 2007: "abo" as subtraction, numbers formed by the Chinese Remainder Theorem), stop and try another problem, or check other possible bases first.

0.3 Other Miscellany

1. Calendars come in fairly few types: the Latin calendar, its months, and 7-day weeks are very common worldwide. Otherwise, look for repetitions of period about 28 days, or a divisor of about 365. Weirder systems are possible, but the Julian calendar is about as weird as it gets.

2. In problems on possession, the trick is usually the difference between inherent possession (e.g. of body parts) and alien possession (e.g. of personal possessions, or abducted humans). That is, it is a well-established cross-linguistic tendency (see http://specgram.com/CLIV.3/07.pspress.interpreter.html) for languages to make this distinction.

3. Heavy/light or open/closed syllables come up almost every year. They're always worth marking on phonology problems.

1 Some problems

1. [1] Here are some Thai words written in the standard Thai writing system, followed by their phonetic transcriptions in Roman letters and their English meanings:

หวาย กาย ถาด วาย ทาน วัย ลาว

ท่าน ทัน ถาก ว่าย หลัง หลาว กาว

Roman alphabetic transcriptions and English meanings (in random order, with one mistake for added challenge):

thâ:k	to clear (a field)	than	to have time	tha:n	charity'
vày	to swim	láng	thorn	vay	age
lá:w	bamboo shoot	ka:w	'glue'	thâ:t	tray
va:y	to end	la:w	Laotian	ka:y	body
vá:y	rattan	thà:n	You (informal)		

Match the transcriptions to the correct Thai words.

2. [2] Fill in the missing Babylonian characters: