Eighth International Olympiad in Linguistics

Stockholm (Sweden), 19–24 July 2010

Individual Contest Solutions

Problem #1. Rules:

- form 1: ***-mV-*** after the first vowel, whereby ***V*** depends on the vowel in the following syllable (***a*** before ***a***, ***o*** before ***o*** or ***u***, ***e*** before ***i***, ***ö*** before ***ü***);
- form 2:
  - ***-a***, if the stem ends in ***-aR*** or ***-oR***,
  - ***-Ra***, if the stem ends in ***-i***, ***-u*** or ***-ü***,

  where ***R*** is ***l*** or ***n*** if one of these consonants is found in the root, or ***r*** otherwise;
- form 3: form 2 with ***-r-*** after the first vowel, unless ***R*** follows immediately.

Answers:

form 1	form 2	form 3
ɧamerki	*ɧarkira*	
jömölkü	*jölküla*	*jölküla*
qamalq̇al	*qalq̇ala*	
qumorooɋu	*qurooɋura*	*qurooɋura*
somonḳon	*sonḳona*	*sonḳona*

form 1	form 2	form 3
amolq̇ol	***alq̇ola***	*alq̇ola*
emensi	***ensina***	
ɧömörčü	***ɧörčüra***	
čumaraq̇ar		***čuraq̇ara***
ɧamoloɋu		***ɧaloɋula***
ïmankan		***ïnkana***
jemeči		***jerčira***

Problem #2.

- 1–4: ***caa*** 1, ***lue*** 2, ***köni*** 3, ***eke*** 4;
- 5, 10, 15: β-***pi*** $= 5\beta$ $(1 \le \beta \le 3)$;
- 6–9, 11–14, 16–19: α-***ngömen*** $= 5 + \alpha$, α-***ko*** $= 10 + \alpha$, α-***qaihano*** $= 15 + \alpha$ $(1 \le \alpha \le 4)$; ***-e-ko*** $>$ ***-ako***
- 20, 40, 60, 80: γ-***atr*** $= 20\gamma$ $(1 \le \gamma)$; ***caa-atr*** $>$ ***caatr***, ***eke-atr*** $>$ ***ekaatr***
- 21–39, 41–59, ...: Γ ***nge*** $\Delta = \Gamma + \Delta$ $(\Gamma = 20\gamma, 1 \le \Delta \le 19)$.

(a) *caatr nge caako*: **31**, *caatr nge caangömen*: **26**, *caatr nge caaqaihano*: **36**, *ekaatr nge ekengömen*: **89**, *köniatr nge köniko*: **73**, *köniatr nge könipi*: **75**, *köniatr nge köniqaihano*: **78**, *lueatr nge lue*: **42**, *lueatr nge luako*: **52**, *lueatr nge luepi*: **50**.

(b) *köniatr nge eke*: **64** + *caatr nge luepi*: **30** = *ekaatr nge ekako*: **94**
luengömen: **7** + *luako*: **12** = *ekeqaihano*: **19**

(c) 21: ***caatr nge caa***, 48: ***lueatr nge köningömen***, 83: ***ekaatr nge köni***.