

Sixth International Olympiad in Theoretical, Mathematical and Applied Linguistics

Bulgaria, Sunny Beach, 4–9 August 2008

Solutions of the Problems of the Individual Contest

Problem #1. Rules:

1. The apostrophe indicates length if it follows a vowel, and is read as [ə] if it follows a consonant.
2. The letter **w** stands for a rounding of the lips after a consonant and for the sound [w] otherwise.
3. [ə] is pronounced, though not written, between any consonant and a following sonorant consonant ([l m n]).
4. [ə] is also pronounced before a consonant cluster at the beginning of a word.
5. **p t j g gw q qw** are pronounced as voiced consonants ([b d j g g^w y y^w]) at the beginning of a word or between vowels and as voiceless consonants ([p t c k k^w x x^w]) at the end of a word or next to another consonant.

Answers:

- (a) 12 [əksənxōyon], 13 [ətkəbox], 14 [gəmūjəmin], 15 [emtoy^watk], 16 [dēbəlc];
(b) 17 *tp'te'sn*, 18 *mtesgm*, 19 *alapt'g*, 20 *glamen*.

Problem #2. (a) Rules:

1. Number of syllables. Each line contains 6 syllables.
2. Alliteration. See the statement of the problem.
3. Internal rhyme. Let us denote the vowels (and diphthongs) in each line by V₁, V₂, ..., V₆. At least one consonant immediately following V₅ must immediately follow V_n ($n = 1, 2$ or 3). Also, in even lines V_n = V₅.

For instance, cf. lines IV, 1–6 (alliteration is marked in boldface, internal rhyme by underlining):

IV

- 1 háði gramr, þars gnúðu,
- 2 geira hregg við seggi,
- 3 (rauð fnýsti ben blóði)
- 4 bryngogl í dyn Skóglar,
- 5 þás á rausn fyr ræsi
- 6 (réð eggliituðr) seggir ...

(b) Leftover words: **hœgra, smíði**.

V

- | | | | |
|---|----------|--|---|
| 1 | <i>a</i> | ríks | (þreifsk reiddra <u>øxa</u>) |
| 2 | <i>b</i> | rymr | ; knóttu spjór <i>c</i> glymja) |
| 3 | <i>d</i> | svartskyggð | bitu seggí |
| 4 | <i>e</i> | sverð | þjóðkonungs ferðar , |
| 5 | <i>f</i> | þás (hugfyldra holða) | |
| 6 | <i>g</i> | hlaut | <i>h</i> andskoti <i>i</i> Gauta |
| 7 | <i>j</i> | songr | of <i>k</i> svírum) |
| 8 | <i>l</i> | sigr | (flugbeiddra <i>m</i> vigra). |