

Задание 1 (35 баллов).

Read the task and answer the questions below.

A row of recruits are being drilled on parade grounds. Their captain gives them a command “To the right!” The recruits randomly turn to the right or to the left. The captain repeats the command “To the right!” Upon hearing this, the next thing happens: All recruits that are facing each other decide they did it wrong and turn all around (180 degree) to face the opposite direction. The number of recruits is a finite positive n .

1. Is it possible that the recruits will be turning around infinitely? If yes, provide the conditions, including n (the number of the soldiers) and what happens next. If it is impossible, prove why.
2. Under which circumstances, all soldiers will at some point face rightwards? leftwards?
3. Under which circumstances, the soldiers will not be turning around after the first turn (will make only one turn).

Задание 2 (65 баллов).

... though thou givest many gifts
(Proverbs 6: 35)

In each example, provide plausible interlinear morphological glossing. Where necessary, explain the distribution of the markers (to the limit the data allows). Try to provide a typologically informed characterization of the system of expression of number on the noun and the verb.

Notes and hints: assume $-ǎ$ is a root morpheme. The acute indicates high tone, and low tone is left unmarked; \sim over a vowel indicates its nasalization.

1. Tsenbó: gyaǎ́. I gave a cow.
2. Tsenbó: nēnǎ́. I gave two cows.
3. Tsenbó: gǎ́ déǎ́. I gave (three or more) cows.
4. Aypǎ́i?egǎ́ déǎ́. I gave a potato.
5. Aypǎ́i?e nēnǎ́. I gave two potatoes.
6. Aypǎ́i?e gyatǎ́. I gave (three or more) potatoes.
7. Tsé gyaǎ́. I gave a horse.
8. Tsé nēnǎ́. I gave two horses.
9. Tséǎ́ gǎ́ déǎ́. I gave (three or more) horses.
10. Tsǎ́o: gyaǎ́. I gave a stone.
11. Tsǎ́o: nēnǎ́. I gave two stones.
12. Tsǎ́o: gyatǎ́. I gave (three or more) stones.
13. Yáypǎ́ gyaǎ́. I gave a rope.
14. Yáypǎ́ nēnǎ́. I gave two ropes.
15. Yáypǎ́ gyatǎ́. I gave (three or more) ropes.
16. Aydēǎ́ gǎ́ déǎ́. I gave a leaf.
17. Aydē nēnǎ́. I gave two leaves.
18. Aydē gyatǎ́. I gave (three or more) leaves.