

(Q) Pluses and Minuses (1/1)

- Q1.** a. $1/8 + 2/8 = 3/8$
b. $7/3 + 1/6 = 2\ 1/2$
c. $2/9 + 1/9 = 2/6$
d. $5/5 + 1/7 = 1\ 1/7$
e. $2/7 + 2/5 = 24/35$
f. $2/6 + 1/9 = 8/18$
g. $1/4 - 3/20 = 1/10$

- Q2.** a. tört
b. on pys
c. čybirgi ýs

Q3. whole (indicates that the number before it is not part of a fraction)

Explanation

The base of the Khakas number system is 10. The numbers from 1 to 10 in Khakas are as follows: pir, iki, ýs, tört, pys, altu, čyti, sygis, toğus, on. The word for 20 is čybirgi.

Numbers above 10 are formed as follows: number_tens number_units. Fractions in Khakas are formed using two different constructs:

- 1) (Denominator + $-nu\eta$ / $-ni\eta^1$) (numerator + $-zi$ / $-i^2$). Here if the base of the numeral ends in $-s^3$, it is voiced. Only then add the appropriate suffix.
- 2) (Numerator) (Denominator + $-lu\check{g}/-lig$ or $-nu\check{g}/-nig$ or $-tu\check{g}/-tig^4$)

¹This is a possessive ending. In general, except $-nu\eta$ / $-ni\eta$. The ending is $-tu\eta$ / $-ti\eta$. The first pair is used when the base numeral ends in a vowel or voiced consonant, the second when the base ends in a voiceless consonant. Since voicing occurs before adding the ending, the second pair of endings is not observed in this data.

²This is the ending of the possessive form in the third person. Generally endings are $-zu$ / $-zi$ when the base ends in a vowel and $-u$ / $-i$ when it ends in a consonant. Only the former occur in the data.

³In general, when the base of the numeral ends in p / t / s they are voiced, converting respectively to b / d / z . In the data only the $s \rightarrow z$ voicing is observed.

⁴ $-lu\check{g}/-lig$ is added to a numeral whose base ends in a vowel or voiced consonant, other than m / n / η , in which case $-nu\check{g}/-nig$ is added; otherwise $-tu\check{g}/-tig$ is added.

Note: The suffixes containing $-u$ are added to the numerals whose last syllable contains $-y$ / $-o$, otherwise use endings containing $-i$.

