

A Number System of Their Own

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Kaktovik numerals were developed by Inuit students in Kaktovik, Alaska, in 1994. The numerals are designed to be easy for speakers of the Iñupiaq language to understand.

Here are seven simple equations using Kaktovik numerals, together with the Iñupiaq word(s) for the number on the right side of the equals sign. You'll be asked to solve for the variables a , b , and c , and determine some of the Iñupiaq words for numbers.

i) $W - \text{𐀀} = \text{𐀁}$ *atausiq*

ii) $V \times a = \text{𐀂}$ *tallimat pinasut*

iii) $W + \text{𐀂} = \text{𐀃}$ *qulit malguk*

iv) $b - \text{𐀁} = \text{𐀄}$ *akimiagutailaq*

v) $\text{𐀁}^\circ - W = \text{𐀅}$ *akimiaq atausiq*

vi) $V\text{𐀅} \div \text{𐀃} = \text{𐀂}$ *tallimat pinasut*

vii) $\text{𐀆} \times c = \text{𐀇}$ *iñuiññaq qulit*

Challenge 1

What are a , b , and c in Kaktovik numerals?

Challenge 2

What are the Iñupiaq words for 3, 11, and 22?