

UC 32159

photograph

This fragment contains a part of the best known Egyptian table text, the $2:n$ table. The $2:n$ table was used for fraction reckoning. Egyptian fraction reckoning used only unit fractions. Fractions that have, in our modern notation, a numerator bigger than one were expressed as sums of different unit fractions.

The $2:n$ table gives sums of unit fractions for the result of the division $2:n$ (2 divided by n), with odd n . Its most extensive version extant can be found in the Rhind mathematical papyrus, which shows the table for the odd numbers $n=3$ up to $n=101$.

The fragment UC 32159 shows the table for the odd numbers $n=3$ to $n=21$. The sum of unit fractions given are exactly the same as in the Rhind papyrus. This supports the conclusion that although for every n there is a unique representation of $\frac{2}{n}$ as a sum of distinct unit fractions, the representation is not unique.