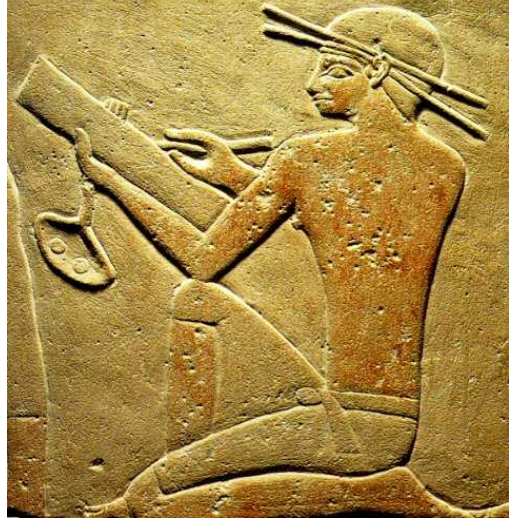


В Древнем Египте дроби записывали в виде суммы *различных* долей, то есть дробей вида  $1/n$  с *разными* натуральными знаменателями. Как записал бы дробь  $5/21$  египетский писец? Достаточно привести хотя бы один пример.



$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{1} = \frac{5}{21}$$

сравнить дроби

$$\frac{3}{10}$$

$$\frac{2}{15}$$

$$15 = 5 \cdot 3$$

$$10 = 2 \cdot 5$$

$$\text{НОК} = 5 \cdot 3 \cdot 2$$

$$\frac{3}{2 \cdot 5} = \frac{3 \cdot 3}{5 \cdot 3 \cdot 2} = \frac{9}{\text{НОК}}$$

$$\frac{2}{5 \cdot 3} = \frac{2 \cdot 2}{5 \cdot 3 \cdot 2} = \frac{4}{\text{НОК}}$$

$$\frac{3}{10} > \frac{2}{15}$$

$$\begin{aligned} \frac{3}{10} + \frac{2}{15} &= \frac{9}{5 \cdot 3 \cdot 2} + \frac{4}{5 \cdot 3 \cdot 2} = \\ &= \frac{9}{30} + \frac{4}{30} = \frac{13}{30} \end{aligned}$$

$$\frac{7}{9} = \frac{2}{9} + \frac{5}{9}$$

$$\frac{7}{9} \neq \frac{2}{5} + \frac{5}{4}$$

$$\frac{3}{10} + \frac{2}{15} = \frac{3 \cdot 3}{30} + \frac{2 \cdot 2}{30} = \frac{9}{30} + \frac{4}{30} = \frac{13}{30}$$

$$\frac{5}{21} = \frac{1}{21} + \frac{1}{21} + \frac{1}{21} + \frac{1}{21} + \frac{1}{21}$$

$$\begin{aligned} \frac{5}{21} &= \frac{2}{21} + \frac{3}{21} = \frac{2}{21} + \frac{3 \cdot 3}{3 \cdot 7} = \\ &= \frac{2}{21} + \frac{3 \cdot 1}{3 \cdot 7} = \frac{2}{21} + \frac{1}{7} = \\ &= \frac{4}{42} + \frac{1}{7} = \frac{1}{42} + \frac{3}{42} + \frac{1}{7} = \\ &= \frac{1}{42} + \frac{1}{14} + \frac{1}{7} \end{aligned}$$

$$\begin{aligned} \frac{5}{21} &= \frac{1}{21} + \frac{4}{21} = \frac{1}{21} + \frac{12}{63} = \\ &= \frac{1}{21} + \frac{1}{63} + \frac{11}{63} = \\ &= \frac{1}{21} + \frac{5}{63} + \frac{7}{63} = \\ &= \frac{1}{21} + \frac{5}{63} + \frac{1}{9} = \\ &= \frac{1}{21} + \frac{1}{63} + \frac{4}{63} + \frac{1}{9} = \\ &= \frac{1}{21} + \frac{1}{63} + \frac{8}{126} + \frac{1}{9} = \\ &= \frac{1}{21} + \frac{1}{63} + \frac{1}{126} + \frac{7}{126} + \frac{1}{9} = \\ &= \frac{1}{21} + \frac{1}{63} + \frac{1}{126} + \frac{1}{18} + \frac{1}{9} \end{aligned}$$

$$\frac{5}{21} = \frac{2}{21} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{1}{21} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{3}{63} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{6}{126} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{6}{126} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{1}{126} + \frac{5}{126} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{1}{126} + \frac{2}{126} + \frac{3}{126} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{1}{126} + \frac{1}{63} + \frac{3}{126} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{1}{126} + \frac{1}{63} + \frac{1}{42} + \frac{3}{21} =$$

$$\frac{1}{21} + \frac{1}{126} + \frac{1}{63} + \frac{1}{42} + \frac{1}{7} =$$