to a sum of unit fractions (see Table 1-1). The numerator is always 2 and the denominators are the odd numbers from 3 through 101. There are no even denominators because $2 \div 12$, for instance, can immediately be replaced by $1 \div 6$, or $\overline{6}$, which is a unit fraction.

Table 1-1 Table of $2 \div n$

$2 \div 3 = \overline{2} + \overline{6}$	$2 \div 53 = \overline{30} + \overline{318} + \overline{795}$
$2 \div 5 = \overline{3} + \overline{15}$	$2 \div 55 = \overline{30} + \overline{330}$
$2 \div 7 = \overline{4} + \overline{28}$	$2 \div 57 = \overline{38} + \overline{114}$
$2 \div 9 = \overline{6} + \overline{18}$	$2 \div 59 = \overline{36} + \overline{236} + \overline{531}$
$2 \div 11 = \overline{6} + \overline{66}$	$2 \div 61 = \overline{40} + \overline{244} + \overline{488} + \overline{610}$
$2 \div 13 = \overline{8} + \overline{52} + \overline{104}$	$2 \div 63 = \overline{42} + \overline{126}$
$2 \div 15 = \overline{10} + \overline{30}$	$2 \div 65 = \overline{39} + \overline{195}$
$2 \div 17 = \overline{12} + \overline{51} + \overline{68}$	$2 \div 67 = \overline{40} + \overline{335} + \overline{536}$
$2 \div 19 = \overline{12} + \overline{76} + \overline{114}$	$2 \div 69 = \overline{46} + \overline{138}$
$2 \div 21 = \overline{14} + \overline{42}$	$2 \div 71 = \overline{40} + \overline{568} + \overline{710}$
$2 \div 23 = \overline{12} + \overline{276}$	$2 \div 73 = \overline{60} + \overline{219} + \overline{292} + \overline{365}$
$2 \div 25 = \overline{15} + \overline{75}$	$2 \div 75 = \overline{50} + \overline{150}$
$2 \div 27 = \overline{18} + \overline{54}$	$2 \div 77 = \overline{44} + \overline{308}$
$2 \div 29 = \overline{24} + \overline{58} + \overline{174} + \overline{232}$	$2 \div 79 = \overline{60} + \overline{237} + \overline{316} + \overline{790}$
$2 \div 31 = \overline{20} + \overline{124} + \overline{155}$	$2 \div 81 = \overline{54} + \overline{162}$
$2 \div 33 = \overline{22} + \overline{66}$	$2 \div 83 = \overline{60} + \overline{332} + \overline{415} + \overline{498}$
$2 \div 35 = \overline{30} + \overline{42}$	$2 \div 85 = \overline{51} + \overline{255}$
$2 \div 37 = \overline{24} + \overline{111} + \overline{296}$	$2 \div 87 = \overline{58} + \overline{174}$
$2 \div 39 = \overline{26} + \overline{78}$	$2 \div 89 = \overline{60} + \overline{356} + \overline{534} + \overline{890}$
$2 \div 41 = \overline{24} + \overline{246} + \overline{328}$	$2 \div 91 = \overline{70} + \overline{130}$
$2 \div 43 = \overline{42} + \overline{86} + \overline{129} + \overline{301}$	$2 \div 93 = \overline{62} + \overline{186}$
$2 \div 45 = \overline{30} + \overline{90}$	$2 \div 95 = \overline{60} + \overline{380} + \overline{570}$
$2 \div 47 = \overline{30} + \overline{141} + \overline{470}$	$2 \div 97 = \overline{56} + \overline{679} + \overline{776}$
$2 \div 49 = \overline{28} + \overline{196}$	$2 \div 99 = \overline{66} + \overline{198}$
$2 \div 51 = \overline{34} + \overline{102}$	$2 \div 101 = \overline{101} + \overline{202} + \overline{303} + \overline{606}$

The papyrus explains how some of the table entries were obtained. Some can be found in the manner explained previously. However, not all the partitions in the $2 \div n$ table fit these methods, and mathematicians have sought other explanations. The simplest partition of $2 \div n$ would have been $\overline{n} + \overline{n}$, but in writing a sum of unit fractions, the Egyptian never repeated a unit fraction. Another partition could be found by observing that $2 = 1 + \overline{2} + \overline{3} + \overline{6}$, and hence

$$2 \div n = \frac{2}{n} = \frac{1 + \overline{2} + \overline{3} + \overline{6}}{n} = \overline{n} + \overline{2n} + \overline{3n} + \overline{6n}.$$