
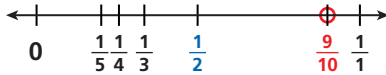







Game Time

Egyptian Fractions

If you were to divide 9 loaves of bread among 10 people, you would give each person $\frac{9}{10}$ of a loaf. The answer was different on the ancient Egyptian Ahmes papyrus, because ancient Egyptians used only *unit fractions*, which have a numerator of 1. All other fractions were written as sums of different unit fractions. So $\frac{5}{6}$ could be written as $\frac{1}{2} + \frac{1}{3}$, but not as $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$.



Method	Example
Suppose you want to write a fraction as a sum of different unit fractions.	$\frac{9}{10}$ 
Step 1. Choose the largest fraction of the form $\frac{1}{n}$ that is less than the fraction you want.	 
Step 2. Subtract $\frac{1}{n}$ from the fraction you want.	$\frac{9}{10} - \frac{1}{2} = \frac{2}{5}$ remaining 
Step 3. Repeat steps 1 and 2 using the difference of the fractions until the result is a unit fraction.	 
Step 4. Write the fraction you want as the sum of the unit fractions.	$\frac{9}{10} = \frac{1}{2} + \frac{1}{3} + \frac{1}{15}$ 

Write each fraction as a sum of different unit fractions.

1. $\frac{3}{4}$

2. $\frac{5}{8}$

3. $\frac{11}{12}$

4. $\frac{3}{7}$

5. $\frac{7}{5}$

Egg Fractions

This game is played with an empty egg carton. Each compartment represents a fraction with a denominator of 12. The goal is to place tokens in compartments with a given sum.

A complete copy of the rules is available online.

