Earliest Mathematics

We begin our study of the history of mathematics as far back in history as we can. The earliest form of mathematics that we know is counting, as our ancestors worked to keep track of how many of various things they had. and the earliest evidence we have is a prehistoric bone on which have been marked some tallies, which sometimes appear to be in groups of five. You can see a picture of these marks on what is now called the "Ishago bone" at Prehistoric Mathematics . The earliest civilization we know to then develop methods of adding, subtracting, multiplying, and dividing are the ancient Egyptians. In the readings below, we will see some history of the time period, as well as the methods the Egyptians used for counting and basic mathematical operations. The third reading is a timeline, which you might find helpful during this first part of our course.

Readings

First Reading: (Video) The Language of the Universe: Mathematics in Ancient Times

- Watch at least Section 1: Emergence of a New Universe

Second Reading: Egyptian Mathematics

- Section 1: Basic Facts About Ancient Egypt
- Section 2: Counting and Arithmetic: Basics

Third Reading: Egyptian Fractions: Ahmes to Fibonacci to Today

Fourth Reading: Chronology for 30000BC to 500BC

Questions

Question 1 *When are the first symbols for numbers used?* $\underset{\text{given}}{\boxed{3400}}$ *BC*

Question 2 *What kind of fractions did the Ancient Egyptians use?*

Multiple Choice:

(a) *They did not use fractions.*

Learning outcomes:
Author(s):
See Prehistoric Mathematics at http://www.storyofmathematics.com/prehistoric.html
See The Language of the Universe: Mathematics in Ancient Times at http://library.ohio-state.edu/record=b7179127~S7
See Egyptian Mathematics at http://www.math.tamu.edu/~don.allen/history/egypt/egypt.html
See Egyptian Fractions: Ahmes to Fibonacci to Today at http://www.jstor.org.proxy.lib.ohio-state.edu/stable/27967280
See Chronology for 30000BC to 500BC at http://www-history.mcs.st-and.ac.uk/Chronology/30000BC_500BC.html

(b) *Unit fractions* $\frac{1}{n}$ ✓

(c) *Only the fractions* $\frac{1}{2}$, $\frac{2}{3}$, *and* $\frac{3}{4}$

(d) *All fractions that we use today.*