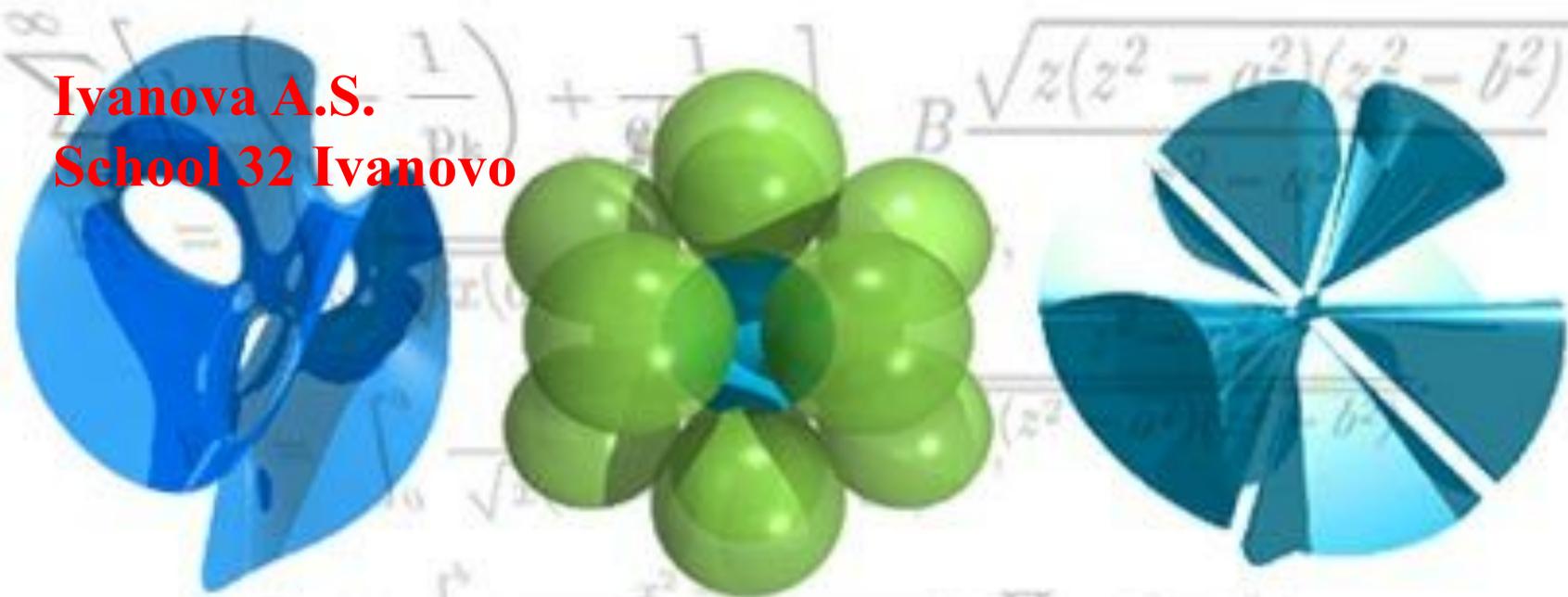
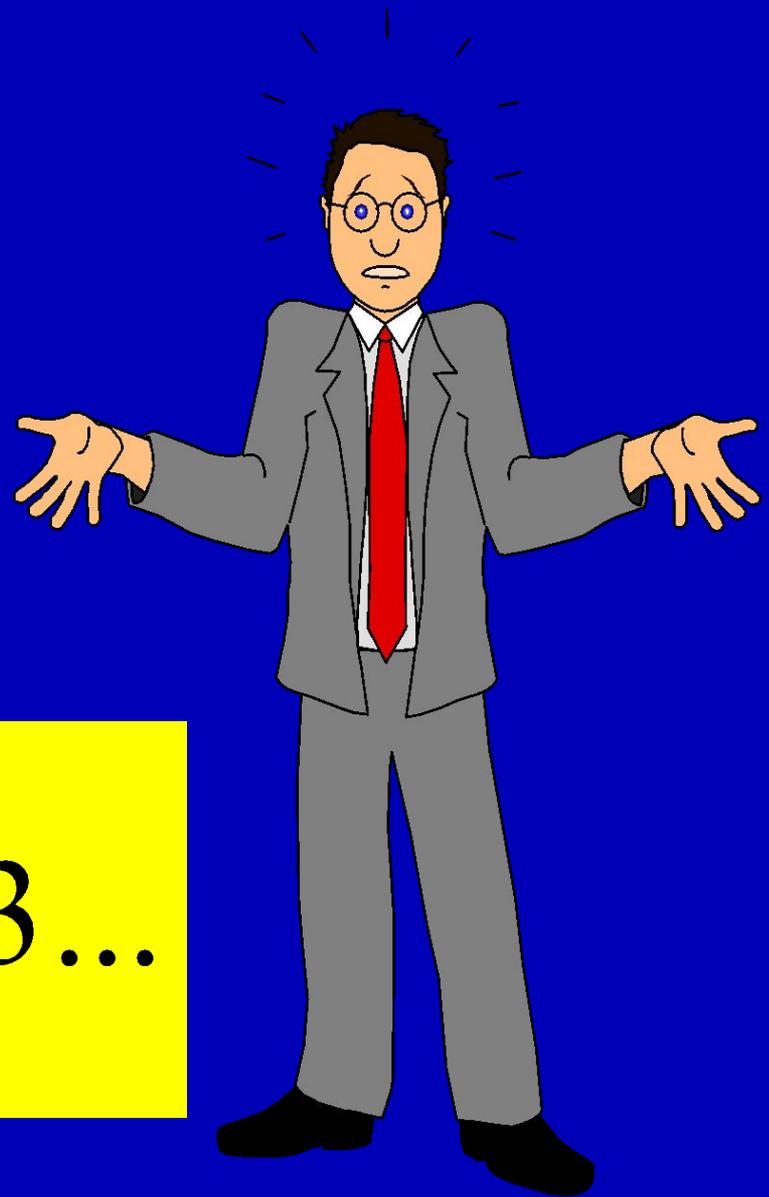


Ivanova A.S.
School 32 Ivanovo



HISTORICAL ROOTS OF FRACTIONS



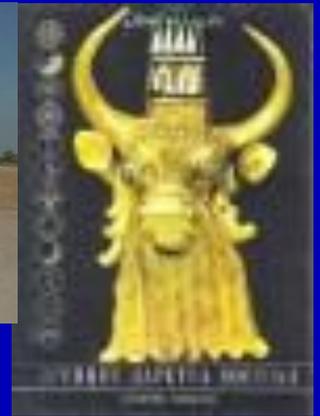
$$\frac{157}{13} = 12,076923\dots$$

MAIN QUESTIONS:

- **WHAT FRACTION IS?**
- **WHO INVENTED FRACTIONS?**
- **HOW DID THE NOTION OF FRACTION DEVELOPE & EVOLUTION?**



EGYPT



BABILON



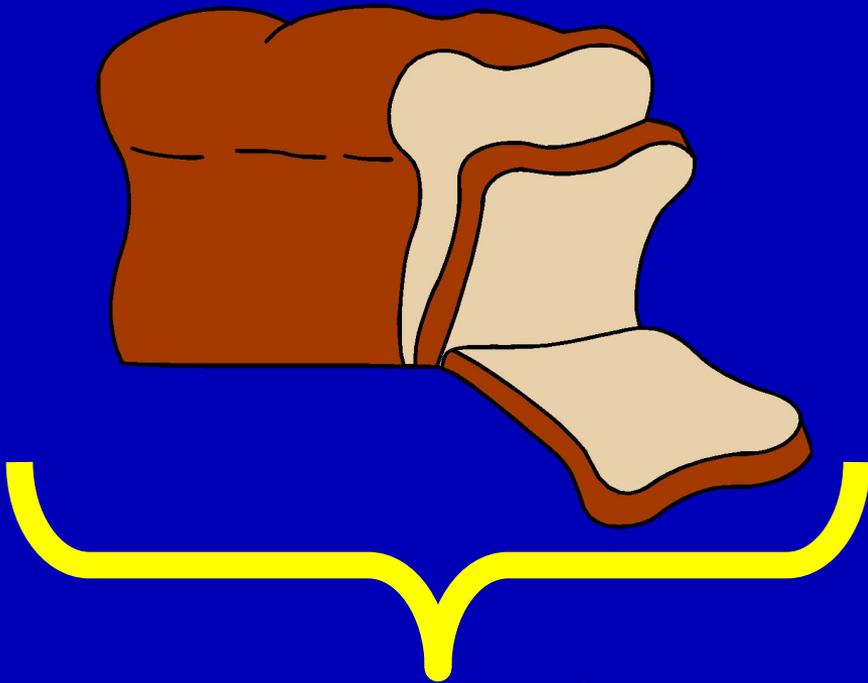
GREECE



CHINA

RUSSIA



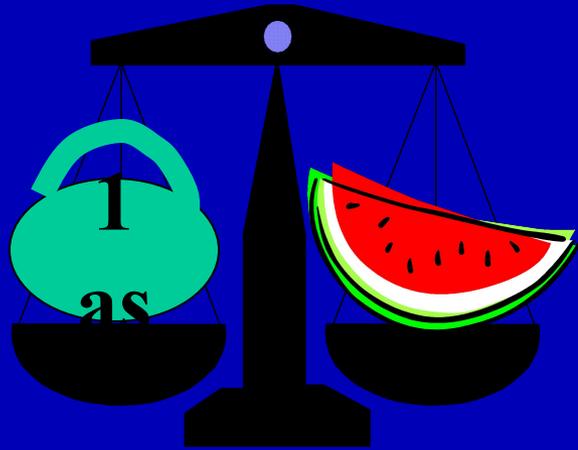


parts



n

FRACTIONS IN ANCIENT ROME



«*as*» - main mass unit.



$1/12 =$ **uncia**

$2/12 =$ **sextans**

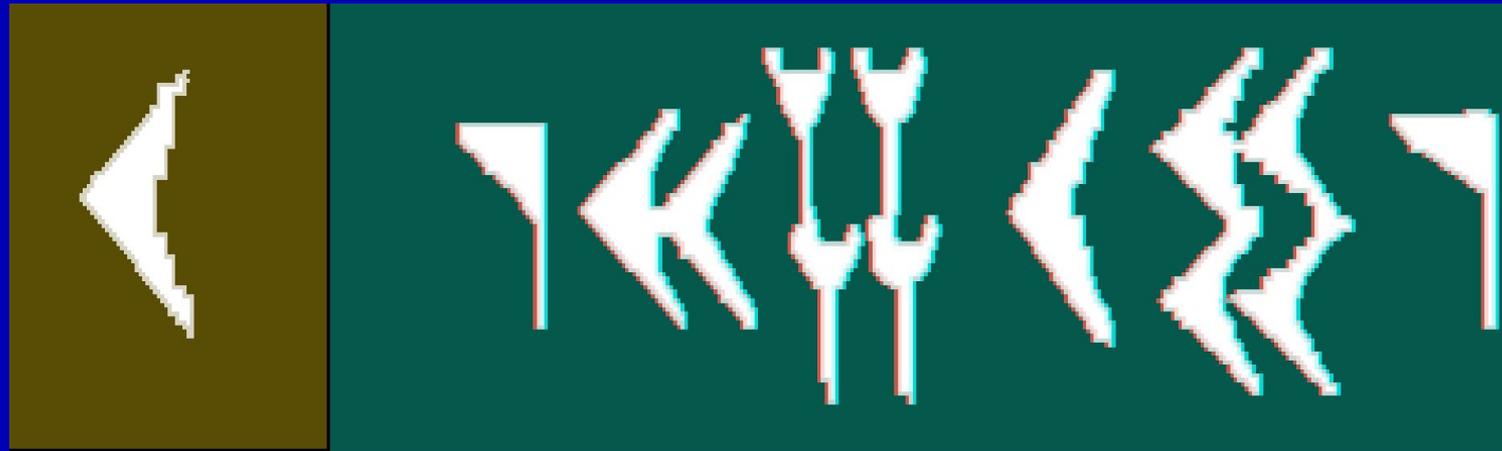
$3/12 =$ **quadrans**

$4/12 =$ **triens**

$6/12 =$ **semis**

FRACTIONS IN BABILON

THE NUMERAL



HAS BEEN FOUND ON AN OLD
BABYLONIAN TABLET FROM THE
YALE COLLECTION.

$$\approx \sqrt{2}$$

FRACTIONS IN BABILON

THE SYMBOLS ARE



$= 1$



$= 51$



$= 24$



$= 10$

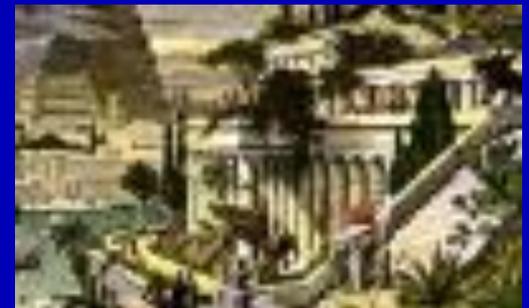
FRACTIONS IN BABILON

Because the Babylonians used a base 60, or sexagesimal, system,

THIS NUMBER IS

$$1 \times 60^0 + 24 \times 60^{-1} + 51 \times 60^{-2} + 10 \times 60^{-3},$$

or about 1.414222...



FRACTIONS IN RUSSIA

These terms were used before the 17 century:

$\frac{1}{2}$ - половина, полтина

$\frac{1}{4}$ - четь

$\frac{1}{8}$ - полчеть

$\frac{1}{16}$ - полполчеть

$\frac{1}{32}$ - полполполчеть
(малая четь)

$\frac{1}{7}$ - седмина

$\frac{1}{3}$ - треть

$\frac{1}{6}$ - полтреть

$\frac{1}{12}$ - полполтреть

$\frac{1}{24}$ - полполполтреть
(малая треть)

$\frac{1}{5}$ - пятина

$\frac{1}{10}$ - десятина



THANK'S FOR ATTANTION