1010: Introduction to Mathematics

- Geometry of the Earth and Universe
- Personal Finance and Beyond
- Consumer Statistics and Probability
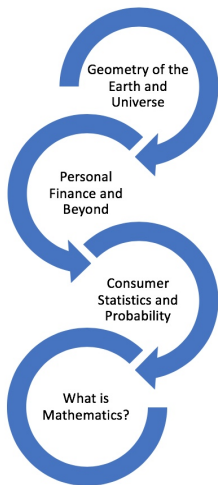- What is Mathematics?

- what mathematics is & offers
- diverse ways that people succeed in and impact it
- truth & consequences, the role of chance and probability
- diverse perspectives & disciplines, including local to global
- critical and creative inquiry and full gened (QL) credit

Grading and Policies

Solidify and Make Connections

exams
projects

Review and Understand Misconceptions

i-clickers
review activities
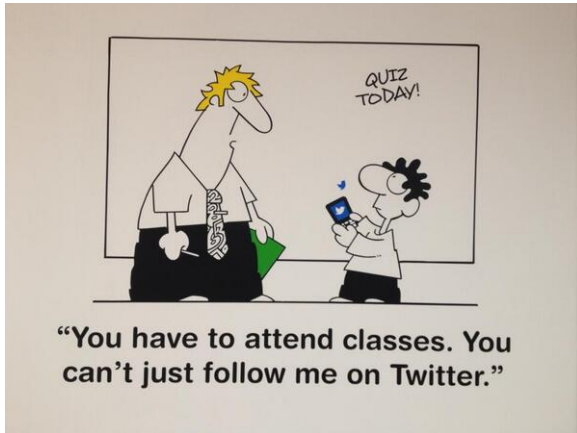
Try it Out!

homework
class and lab activities

- Effective Class Engagement 5%
- Homework 5%
- 2 Projects 40%
- 3 Exams 50%

No late work, but lowest test is dropped and accommodations for emergencies with documentation.

- Work due start of class (can send it with another student)
- under my office door sometime before I leave for class
- or even turn in on ASULearn if need be, but I prefer printed

Critical Academic Indicators

- Attendance
- Engagement with material (in and outside of class)
- Interaction with each other (faculty and other students)

Where to Get Help

- Class
- Office hours
- Math lab
- Google *Dr. Sarah* for course calendar
- ASULearn (Discussion Forums)

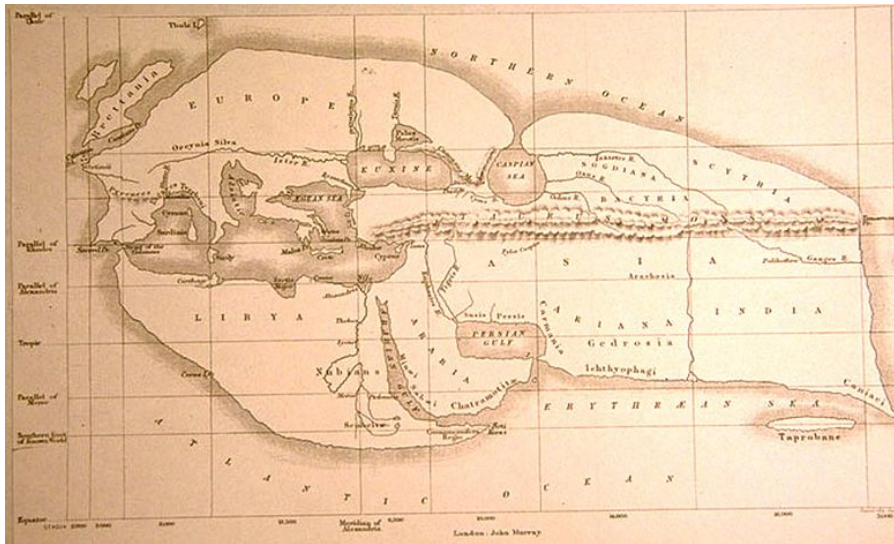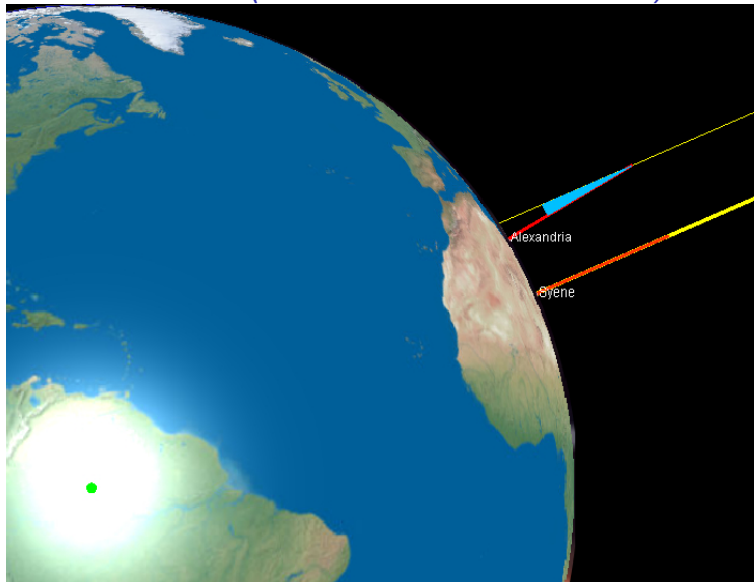I care about you and your success!

Discussion Question

💡 How could we know that the earth is round without using modern technology from the 20th or 21st centuries?
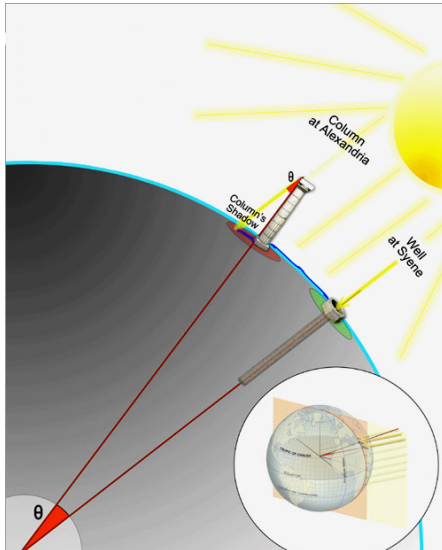
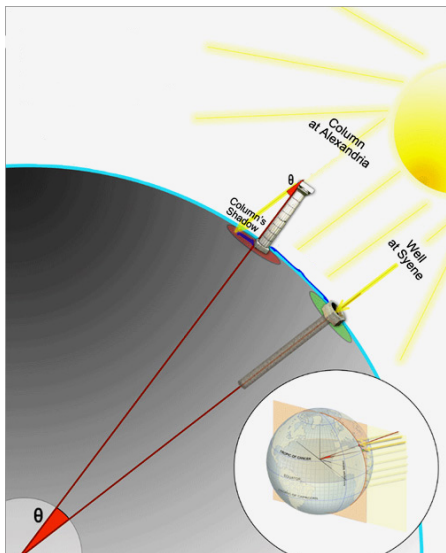# A View of the Earth—Once Upon a Time

Eratosthenes' (~276 BCE – ~195 BCE) Data

Eratosthenes Thinks Big (Globally!)

Eratosthenes Thinks Big (Globally!)

$$\frac{7.2^\circ}{360^\circ} = \frac{5000 \text{ stadia}}{\text{circumference}}$$

Local to Global: Multiple Perspectives

💡 How could we know that the earth is round without using modern technology?

Geography
Philosophy
Physics & Astronomy
Mathematics
History
Navigation
Weather

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Still controversial: flat earth society