final project research/reflection guide hand in

Dr. Sarah's 1010: Introduction to Mathematics

What is Mathematics? To reflect more broadly about the course themes as we tie the segments together.

submission instructions: Fill out A or B and type your responses to submit as text.

To get you started, this is the beginning of research or reflection for the final project. **Select Project A OR Project B!**. I'm happy to help! The idea is to put on your math goggles like in the video and follow the math: choose the most mathematical people and items you can locate to include in your project. See the project criteria and rubric for the full requirements (after you complete this sheet continue researching to find more mathematical items for #3–#7 for Project A or items #1–#4 for Project B).

Project A Initial Research. If you **research how our classes mathematics relates to a topic**...

1. What is one or more topics you are interested in exploring for the final research project? You may need to tweak it later, such as narrowing or broadening it to follow the math.

2. Search for mathematics and your topic(s) and write down a few items of what you find related to mathematical breakthroughs

3. Find a mathematician or civilization/culture that has an important contribution. Provide:
   (a) the name of the mathematician and/or the civilization/culture
   (b) how they contributed to your topic
   (c) when they contributed (a year or range of years)
   (d) the source reference.

4. Find an equation related to the topic and write down the equation or its name, how it connects, and the source reference.

5. Find a mathematical image related to the topic and write down the source reference [note that Google images is not a source reference—you can find the original webpage the image came from].

6. Look for connections from our prior segments (geometry, algebra, and/or probability and statistics). If you select this project, then you can focus on connections from two of the following segments:
   (a) geometry
   (b) algebra
   (c) statistics and probability

7. Look for real-life applications and modern significance of the mathematics.

(OR) **Project B Initial Reflection**. If you **design a creative review of what we covered in class**...

1. For each segment, list a mathematical breakthrough we covered
   (a) geometry

   (b) algebra

   (c) statistics and probability

2. For each segment, list an important mathematician or civilization/culture we covered as follows:
   i. the name of the mathematician and/or the civilization/culture
   ii. how they contributed
   iii. when they contributed (a year or range of years—if we didn't already discuss the years you may need to search for this and keep track of the source reference)
   (a) geometry

   (b) algebra

   (c) statistics and probability

3. For each, list an important equation (or its name) related to what we covered and how it connects
   (a) geometry

   (b) algebra

   (c) statistics and probability

4. For each, find a mathematical image related to what we covered and provide the source reference (you can use images from class or other images).
   (a) geometry

   (b) algebra

   (c) statistics and probability