

If you select **research how mathematics from our class relates to a topic you are interested in...**

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.
  
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 that relates and write down
  - (a) the name of the mathematician and/or the civilization/culture
  - (b) how they contributed
  - (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, 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 (a database) is not a source reference-but you can write down 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.
  
8. Continue researching to find more mathematical items for #3-#7 and keep track of your sources. Put on your math goggles like the video we watched 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. I'm happy to help!

If you select **design a creative review of what we covered in class...**

1. List a few mathematical breakthroughs we covered in each of the segments
  - (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. Write an important equation related to what we covered and how it connects
  - (a) geometry
  
  - (b) algebra
  
  - (c) statistics and probability
  
4. Find a mathematical image related to what we covered and write down the source reference (you can use images from class or other images).
  - (a) geometry
  
  - (b) algebra
  
  - (c) statistics and probability
  
5. Continue reflecting to find more mathematical items for #1-#4. You do not need to organize your project in the way I've had you start the reflection—you can organize it in any way that makes sense to you. See the project criteria and rubric for the full requirements. I'm happy to help!