Visibility Lab

Goals of this lab/project:

- Learn about a mathematician with one or more marginalized identities
- Practice written and/or oral communication skills
- Relate what a mathematician studies/studied to math that we've learned

For this lab/project, you will

1. Choose a mathematician* with one or more marginalized identities
2. By the end of lab on Tuesday October 25th, propose a small project (specifications below) about your chosen mathematician to the instructor for their approval
   a. There will be extra office hours devoted to this assignment in case you'd like a space to ask any questions or discuss any project proposal
3. Prepare your project
4. Share your project in lab on Thursday November 3rd with some of your classmates in small groups, and actively engage with one another's sharing
   a. If you miss lab on Thursday November 3rd, you will instead share your project with Kyrie in a meeting scheduled outside of class

In your project, make sure to include in some form:

- Some background about the mathematician chosen
  - For example, this could include schools they attended, where they grew up, what inspired them to pursue their field of study, their various identities, and so on
- A little bit about why/how you chose that mathematician
- The mathematics** they study/studied (I acknowledge that some of their work will feel out of reach right now; do your best to communicate big ideas and highlight things which interest you)
  - Say a little bit about why their work matters
- Two things from either 105L or 106L which you were reminded of while reading about the work from the previous bullet, and why you were reminded of it
  - This can include a mathematical concept (e.g. limits or integrals), a technique (e.g. the use of sigma notation), or a big idea (e.g. using rectangles to approximate the area under a curve)

A general comment: this assignment is flexible! The "default" project is to do Project Option 1 on the next page as an individual. That said, you may work alone or in groups if you'd like, and if you work in a group, you may either discuss a single mathematician or instead choose to compare and contrast various mathematicians. I'd like you to find joy in this assignment and feel that you have the space for creativity as it calls to you!

*You may interpret the term "mathematician" broadly here because I want you to feel free to choose someone who is close to your personal intellectual interests. For example, I think it reasonable to consider a psychologist, chemist, ecologist, etc. who uses some math in their work to be a mathematician.
**As with the previous comment, you may interpret "mathematics" broadly to include applications of mathematics in economics, biology, physics, etc. as long as: (a) you connect the mathematician's work with two things from 105L and 106L as mentioned above, and (b) you make sure to discuss how the mathematics your chosen mathematician studies is relevant to their non-mathematical work.

Project Option 1: Short Write-up

Write a short, at least 300 words, write-up about your chosen mathematician.

For a group of 2/3/4 people, the word limit becomes 600/900/1200 words.

For comparison, this assignment write-up is a little over 450 words. Also, you may interpret "write-up" somewhat vaguely; you may, for example, write with lists/bullets/short-responses rather than in an essay format if you'd like.

Project Option 2: Short Podcast Episode

Record a short, at least 2 minutes long, podcast episode about your chosen mathematician.

For a group of 2/3/4 people, the time limit becomes 4/6/8 minutes.

Project Option 3: Poster

Prepare a small, at least 18'' by 24'', poster about your chosen mathematician.

For a group of 4 people, prepare a tri-fold poster. For other group sizes in this option, chat with me!

Project Option 4: Anything else you can think of, but you must get instructor approval

- Series of drawings/cartoons
- Video presentation
- Series of poems
- A song
- Anything else!

Some resources for finding a mathematician:

- [Mathematically Gifted & Black](#)
- [Lathisms](#)
- [AWM: On Women in Math](#)
- [Women at Nasa](#)
- [Spectra](#)
- [Living Proof: Stories of Resilience Along the Mathematical Journey](#)