

# Math and Culture Day 2 Notes

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## Elizabeth Castillo: Haida Mathematics

**Interesting:** Chilkat Weaving is very intricate, I had no idea that weavers had terms for things like warp. The designs remind me of persian carpet weaving. I also thought it was cool that Elizabeth only used primary sources for her presentation.

**Confusing:** I can't imagine doing any sort of arithmetic with large numbers, even as low as the hundred without ever writing it down.

## Robert Shidner: Mayan Number System/Astronomy

**Interesting:** I think it's interesting that the Mayans had notation for zero, independently of the Hindu and they were both circular-ish. The whole idea that they used two different calendars simultaneously is interesting.

**Confusing:** Robert mentioned that these two calendars cycle every 52 years and that every 2 cycles lined up with Venus's orbit, I wonder if this is by design or just a happy coincidence.

## Emma Cooper: Chinese Estimation of pi

**Interesting:** I thought it was interesting that even though liu Hui's method only used one inscribed polygon it still ends in an upper and lower bound like Archimedes' method.

**Confusing:** I thought the last inequality with the areas was a little confusing. I think it comes from a geometric interpretation of the inscribed polygons. Essentially it says

that the area of the inscribed polygon plus the difference between the current iteration and the last iteration must be larger than the circle.

## **Desiree Cleveland: Central Alaskan Yup'ik Counting**

**Interesting:** I really like the hand graphics that Desiree used. I also thought it was interesting that counting was a sort of story that describes the traversal of the body.

**Confusing:** I had never been introduced to the term sub base in regards to counting systems, I'm curious as to how it works and if our decimal system also has a sub base of 5.