META

Bijections, FLT, RSA, Polynomials, Secret Sharing

1 General Comments

1. Logistics

- Cookies! (are in 283G)
- Ask them about the guerilla session, if they attended; what they thought about it what they liked/didnt like, etc.
- And also same thing about our review session slides

2. Bijections

- Make sure that they understand one-to-one = injective and onto = surjective
- Make sure to go over what it means to be a well-defined function, this is *essential* to understanding injective/surjective.
- Don't be afraid to spend a good chunk of time talking through the drawings.
- Many students will assume that surjections are just injections from the codomain to the domain (they are not!).
- The why is this mapping (not) bijective questions are important
- Make sure theyre comfortable with bijections (this will be especially important in RSA)
- Emphasize that bijection is equivalent to invertibility.

3. FLT

Last question is kind of repetitive skip if low on time

4. RSA

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• Sections earlier in the week may not have strong RSA practice, so dont spend too much time if they arent very familiar with it

- If you dont get to the RSA questions, briefly explain how it works on a high-level
- Make sure they understand how RSA actually works the implementation questions test for that pretty well
- Draw a picture! Ask what is public? What is private?
- Coin tosses question is interesting. Tests if they actually understand why RSA works, rather than just how its implemented
- Go over the proof from notes on how/why RSA works

5. CRT

- THIS SECTION WAS REMOVED. NOT COVERED THIS SEMESTER
- 6. Polynomials
 - Monday-Wednesday will probably not get to this
- 7. Secret Sharing
 - This is in there just for Friday people
- 8. Mandatory questions you have to get to
 - Bijections: Why you cant find injections/bijections between some spaces
 - FLT: FLT Proof
 - RSA: That one proof about how it works and applies FLT
 - Polynomials: Only do this if you have time, if you get to this do a vanilla intro
 - Secret Sharing: Again do a vanilla intro if you get to this section