Questions about exam we need to answer today? (I'll probably ask this again Monday the 21st.)

Minute Essay From Last Lecture

(Review.)
Recursion Run Amok

- Let’s try to define integer arithmetic (for non-negative integers) without \texttt{ints} as follows:
  - Represent \( n \) as a list of \( n \) things (call this a \texttt{num}).
  - Define “primitive” operations:
    * \texttt{boolean isZero(num N)};
    * \texttt{num add1(num N)};
    * \texttt{num sub1(num N)}; \(\text{(Gives runtime error if isZero(N).)}\)
  - Try to build arithmetic and relational operations using primitive operations and recursion...

- Do you think this is doable in actual code? (Yes!) Will it be fast? (Not very! Particularly slow for exponentiation.)

Minute Essay

- None — sign in, and have a nice break!