## Semester Review

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April 19, 2023

- The final exam will be held on Tuesday at 8:00 am
- If two negative numbers in twos-compliment are added, there will be an overflow (should be stated)
- Practice problems will be posted online
- There will be a minterm/maxterm problem
- There will be a design problem, with truth tables, multiplexers, and decoders
- Multiplexers generally take the form of  $2^{n-1}:1$
- Two use two smaller decoders, rather than a single larger decoder, 'not' one of the inputs, and make it the input of one of the decoders, while the input to the other decoder is just the regular input
  - More specifically, given inputs P, Q, R, S, one could pass P and  $\bar{P}$  to the encoders, with the other inputs as normal
- There will be some kind of class hierarchy question