

A Few Words on Wednesday's Exam

Logistics

- In-class, 50 points in 50 minutes
- **Open-book, open-note exam**
- No calculators, cell phones, laptops, etc.

Format

- Similar to **homework assignments**
- NOT at all like quizzes

Material

- Chapters 1 - 6
- Anything covered in lecture

CSE 240

Exam Focus

Bottom-up, conceptual understanding

- Using/understanding larger logic blocks
- Bridging the levels of abstraction

Design *simple* things

- Design a circuit that does...
- Write a LC-3 snippet that does...
 - Example: build subtract from NOT, ADD+1, ADD

Analyze *complicated* things

- What does this circuit do?
- What does this LC-3 snippet do?
- Complete the circuit such that...

CSE 240

Example Topics (non-exhaustive)

Bits and data

- Data types and conversions
- Binary arithmetic and logical operations

Digital logic

- Transistors and logic gates
- Truth tables and PLAs
- Larger logic blocks: adders, muxes, registers, memories
- State machines

Instructions

- Von Neumann model
- Parts of a computer
- LC-3 instructions (encoding & operation)

Synthesis

- Relationship between digital logic and instruction execution

CSE 240

Suggestions for Exam Preparation

Understand homework assignments

- Use solutions we handed out

Review readings and lecture notes

- Remember: open-book and open-note exam, but only 50 min.

Review old midterms

Work end-of-chapter problems

- Especially Chapter 3 and Chapter 5
- Answers to odd-numbered exercises at book's website

Attend evening review session

CSE 240

Past Distribution on Midterm

