


Midterm 1 Overview

Basic Information

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Midterm Information

- 75 minutes
- 150 points
- May contain multiple choice and short answer questions



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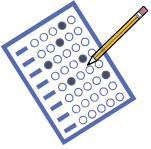
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What you need to bring

- Exam booklets will be provided for the exam
- So, you only need to bring a pen or pencil
- No** electronics allowed
- No** notes allowed



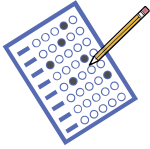
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What Will Be Covered




- Exam will cover Parts 1 to 5
- No question will be asked that is not in the lecture notes
- Download from:
athena.csus.edu/~cookd/28

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Sets

Part 1

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Part 1 – Need to Understand

- Standard sets (\mathbb{Z} , \mathbb{Q} , etc...)
- Set Builder notation
- Venn diagrams
- Set operators
- Set algebra
- Tuples



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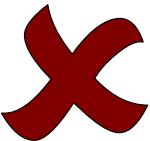
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Part 1 – Don't Worry About

- Example sets (Meeseeks)
- Duels (*we might go into detail later*)

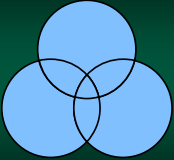


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Sets
Attributes

Part 2

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Part 2 – Need to Understand

- Fundamental Products
- Cardinality
- Inclusion-Exclusion
- Power Series
- Partitions



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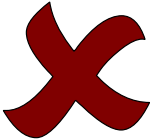
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Part 2 – Don't Worry About

- *Sorry, know it all*



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Sets in
Computer
Science

Part 3

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Part 3 – Need to Understand

- Binary numbers
- Bit vectors



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Part 3 – Don't Worry About

- Encoding IEEE floating point numbers (still need to know the concept, though)

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Relations

Part 4

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Part 4 – Need to Understand

- Cross products
- Binary relations
- Types of relations
- Manipulating Relations
- Closures
- Functions
- Composition

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Part 4 – Don't Worry About

- Sorry, know it all*

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Relations in Computer Science

Part 5

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Part 5 – Need to Understand

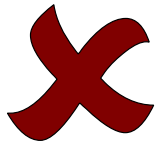
- Abstract Data Types
- Database terminology
- Functions in programming languages are function signatures

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Part 5 – Don't Worry About

- SQL
- Different programming language notations



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