

Exam 1 Topics

All topics and details as covered in class

If something was discussed in class, it can be asked in the exam

No cheat sheets are allowed

- Insertion Sort
 - Pseudocode
 - Cost analysis
 - Setup tables with book keeping for 7 or fewer n
 - Running Time
- Merge Sort
 - Pseudocode
 - Cost analysis
 - Setup tables with book keeping for 7 or fewer n
 - Running Time
 - Recurrences
 - Recursion Tree
- Growth of Functions
 - Understanding of the topic
- Asymptotic notation
 - Theta, Big-O, Big-Omega, little-o, little-omega
 - Mathematical definition, meaning, interpretation, inter-relation, visual representation
- Divide and Conquer
 - Recurrences
- Solving Recurrences
 - Substitution method (as much detail as covered in class)
 - Recursion tree method
 - Master method (definitions, cases, usage)