CMSC 420
Class Lecture 10/18*

Review for Midterm 1
&
Solutions to HW 2

* I’m preparing these slides until my laptop is fixed.
Midterm 1

- In class, **Thu, Oct 20**
- Closed-book, Closed-notes, one “cheat sheet” (front and back)
- Coverage: Everything up to splay trees
Topics

- Basic data structures
- Trees
- Union-Find
- Priority Queues
  - Binary Heap
  - Leftist Heap
- Ordered Dictionaries
  - Unbalanced Binary Search Trees
  - AVL Trees
  - 2-3 Trees
  - Red-Black and AA Trees
  - Treaps
  - Skiplists
  - Splay Trees
Solutions to HW2
Problem 1(a)
Problem 1(b)
Problem 2(a)
Problem 2(b)
Problem 3(a) and (b)
Problem 4(a)

insert(9) -> splay(9)

find 9

zig-zig

zig-zag

zig

link in 9
Problem 4(b)
Problem 5(a)