

COMP 550
Algorithms and Analysis
Spring 2020
Pop Quiz 6
Tuesday, March 31, 2020
Don't forget to write your name on the quiz sheet.

1. For multiplicative hashing, which of the following values for A is best: (a) .250 (b) 0.001 (c) .618 (d) .618033988
2. For division hashing, which of the following is the best value for the modulus? (a) 256 (b) 64 (c) 100 (d) 181
3. If the table size is 200 and there are 150 elements in the table, what is the load factor?
-----150/200-----

In problems 4 through 8, choose one of the following answers:

- A. Hashing with chaining
 - B. Open addressing
 - C. Universal hashing
 - D. Perfect hashing
 - E. None of the above
4. Which method is best if one wants good expected behavior on any particular input?
-----C-----
 5. Which hashing method is best if there is not much storage and one is willing to sacrifice a small amount of speed? -----B-----
 6. Which method is best if one wants good worst case behavior on any input but one can afford a lot of preprocessing time? -----D-----
 7. Which method is best if one wants good expected behavior and there is a lot of storage available? -----A-----
 8. Which method is best if one wants good worst case behavior and one cannot afford much preprocessing time? -----E-----