

CS 3853 Computer Architecture Quiz 5a Fall 2013

This is a closed book exam. You may not use a computer, but you may use a calculator.

Answer all question on this sheet in the space required.

Each problem is worth 3 points:

- 1 point for turning in the paper
2 points for showing some reasonable work
3 points for showing work with the correct answer and if it is numeric, putting a box around the correct answer

- 1) Suppose you have a 64KB 4-way set associative cache with a block size of 32 bytes. How many bits of an address are used for the index?
- 2) Suppose the miss rate per 1000 memory accesses is 22 for a unified cache and 25% of the instructions are loads or stores. What is the miss ratio?
- 3) Suppose the miss rate per 1000 instructions is 22 for a unified cache and 25% of the instructions are loads or stores. What is the miss ratio?