

Quiz Guide

CSC 28 – Discrete Structures for Computer Science

To maximize your quiz performance: attend lectures, do readings, start homework early, ask for help when you need it, review problems and solutions before the quiz. If anything in this assignment does not make sense, please ask for help.

1) Make sure you've done the assigned reading and have reviewed your notes. Some people find it useful to rewrite their class notes into a second notebook, cleaning them up and correcting them as they go. The key to rewriting is to make the second notebook more organized and to study the topics carefully as they are rewritten. You shouldn't write anything in the second notebook until you understand it.

2) Any problem similar to the ones in the homework may be on the quiz. Study them until you completely understand. Some people find it useful to try to write their own problems and then have their classmates try to solve them.

3) Here are some problems from old quizzes. There is no guarantee that the problems on your quiz will be like these, but it may be useful to see what I've asked in the past.

What is the second largest number representable in 32 bit IEEE floating-point notation? For this problem, ignore the fact that special bit patterns have special values. Show work.

What bit-pattern is -3.75 when represented as a 32-bit floating point number? Show work.

Some compilers support quadruple-precision floating point numbers where the exponent is 15 bits (ie, excess-16383 notation) and the significand (fraction) part is 112 bits. What is the smallest representable positive number in this system? Explain.

What real number does the following 32 bits represent according to IEEE single-precision floating-point representation: 11000010000110000000000000000000?