

Fall 2019 COT 3100 Homework #1 Grading Criteria - Total 20 points

Three questions to grade carefully:

Question #2 (5 pts)

Question #4 (5 pts)

Question #6 (5 pts)

Q2 (5 pts) - give full credit ONLY if each step is written nicely one below another AND the reasons applied are clearly marked to the right of each step. If no reasons are given but the steps are valid, take off 2 points. If some reasons are skipped or some steps are skipped the overall the answer is correct, take off 1 point, If there is an actual error beyond skipping steps, take off 2 to 4 points depending on the severity of the error.

Items to comment upon: Clearly explain all skipped steps, skipped reasons or incorrectly marked reasons. **Note: there is a shorter solution than the one in the posted solutions, you can do absorption from the get go to make the whole first "half" of the expression p.**

Q4 (5 pts) - give full credit ONLY if all variables used are fairly clear (they don't have to explicitly say what each stands for, but the names have to be good enough that you can easily tell what each represents), the equations are all valid, and the correct solution is arrived at without any invalid steps. **Note: there are several valid ways to set this problem up and arrive at the correct solution.**

Items to comment upon: Any unclear variables, incorrect equations, incorrect algebraic steps, or situations were "too many steps were skipped" - this latter piece is a judgement call as different people can do different amounts of math in their heads.

Q6 (5 pts) - 2 pts for explaining what is stored in each bit of a single student response, 2 pts for coming up with the bitwise and, 1 pt for mentioning counting the 1 bits in the result of the bitwise and.

Questions 1, 3, 5 and 7 - very quickly eyeball and award 0, 1, 2, 3, 4 or 5 points out of 5. Only give full credit if the last column for #1 is correct, the answer for #3 is correct, the three answers for #5 are correct and there is some write-up for #7. If anything is incorrect of these items but it's mostly complete give 4/5. If there are significant things missing, just judge what you think is best out of 0, 1, 2, or 3 pts.