

Fall 2018 COT 3100 Homework #2 Grading Criteria - Total 20 points

Three questions to grade carefully:

Question #2 (5 pts)

Question #3 (5 pts)

Question #5 (5 pts)

Q2 (5 pts) - 1 pt for subbing in $2k+1$ for the odd integer. 2 pts for expanding out the big expression, however it's done. 1 pt for factoring out 16 from the first two terms, 1 pt for using #1 for the rest of the expression and completing the proof.

Items to comment upon: Point out any algebra errors and any inconsistencies in style. (Students can try to show divisibility, or try start with the original expression and show it equivalent to 1 mod 16.)

Q3 (5 pts) - 3 pts for showing that the sum of the elements is equal to bn . 2 pts for the completion of the proof in any manner after that observation.

Items to comment upon: The key here is to comment on the communication and what is actually written on the paper. Many times, students understand why something works, but haven't clearly put that down on paper. Just comment on any gaps you might see in what they probably understand and what they've written.

Q5 (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.

Questions 1, 4, 6 and 7 - very quickly eyeball and award 0, 1, 2, 3, 4 or 5 points out of 5. Only give full credit if all 4 questions are answered and #6 is correctly answered with a counter-example. If #6 is incorrect max 4/5. If the write up for #7 is missing or very weak, max 4/5.