

### Fall 2017 COT 3100 Homework #3 Grading Criteria

Three questions to grade carefully:

Question #1 (5 pts)

Question #3 (5 pts)

Question #5 (5 pts)

Q1 (5 pts) - Lots of ways to show this. If they go via divisibility, 2 pts for set up 2 pts for factoring, 1 pt for conclusion, if they go mod, then 3 pts expansion, 2 pts reduction by mod.

Items to comment upon: Mostly poor use of notation (a division sign instead of a divisibility sign), not clearly explaining a variable introduced, incorrect mathematics, or lack of words that ought to be there.

Q3 (5 pts) - 1 pt per part, all or nothing, give 0/5 if they don't use the method from class.

Items to comment upon: Comment on their method if they don't use the method, otherwise, just find division and mod errors.

Q5 (5 pts) - 2 pts for the expansion, 2 pts for isolating  $a(3a+1)$ , 1 pt for conclusion

Items to comment upon: Setting up  $n = 2a + 1$ , incorrect algebra raising to the 4<sup>th</sup>, grouping to reduce by mod, etc.

Questions 2,4, 6 and 7 - very quickly eyeball and award 0, 1, 2, 3, 4, or 5 points out of 5. Only give full credit if #6 is complete and looks good, otherwise 4/5 if everything else is reasonable but #6, decide partial on your own otherwise.