

Fall 2019 COT 3100 Homework #2 Grading Criteria - Total 20 points

Three questions to grade carefully:

Question #1 (5 pts)

Question #3 (5 pts)

Question #6 (5 pts)

Q1 (5 pts) - 1 pt for expressing $n = 2a+1$ for some int a , 3 pts for the algebra, 1 pt for the conclusion using the $a(a+1)$ result.

Items to comment upon: Not properly creating a new variable and stating why, incorrect algebra, improper use of the equal sign (should just manipulate the original expression...)

Q3 (5 pts) - 2 pts for using the triangle inequality to bound the third side, 2 pts for expressing the area in terms of each side and altitude, 1 pt for finishing the proof.

Items to comment on: Not properly introducing variables, Off by 1 errors, if there's no explanation as to why we only need to inspect the max and min of the third side.

Q6 (5 pts) - 1 pt per step, roughly

Items to comment on: If they give the wrong name of a rule used or apply the rule incorrectly or leave off the rule, comment on what they should have added/changed.

Questions 2, 4, 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 answer for #4 is correct and there is a reasonable write up present for #7.