

NEIU MATH251: Discrete Mathematics

Multiple Draft Assignment #3

For a circle with n points on the perimeter, please do the following:

- 1) Determine the formula to count the number of quadrilaterals that can be formed by connecting these points.
- 2) Prove that your formula is correct using induction.

You are not allowed to use previous theorems and problems in your proof.

Draft #1 due: Wednesday, November 18th, 2009 at 5:40PM (returned on 11/23/2009).

Draft #2 due: Monday, November 30th, 2009 at 5:40PM (returned on 12/2/2009).

Final Submission due: Wednesday, December 9th, 2009 at 5:40PM.

WORK THAT DOES NOT CONFORM TO THE GUIDELINES LISTED BELOW WILL BE RETURNED UNGRADED

- Work is to be handed in on 8.5" by 11" paper with your name in the upper right corner. Paper torn out of notebooks is not acceptable. If there is more than one sheet of paper, staple them together in the upper left corner.
- I expect to receive the work in a typed format. Please use a standard font, with a standard font size (point 10 or 12). These papers should be double spaced.
- Late papers are accepted only until they are returned to the class, lose 5% per draft/submission (e.g., if you hand in a draft late and a final submission late, you will lose 10% on your grade), and may not be evaluated before the next submission is due.
- You are not allowed to work with others on these assignments. You are responsible for your own write-up. **Cheating is absolutely not tolerated.**
- Multi-draft assignments can always be turned in early, but they will not be returned until after the due date.
- When you hand in the final submission, you must also hand in the original draft(s) with my comments (NOT a copy). As your grade is determined by a combination of all drafts, incomplete final submissions will not be graded.

Evaluation

Out-of-class assignments are graded on the following.

- Mathematical content
 - Appropriate mathematics is used
 - Mathematics is used correctly
 - Logical flow of ideas
 - Do not skip steps
 - Do not combine steps
 - Abbreviations are not allowed
- Written content
 - Effective written expression, including the logical flow of ideas
 - Correct written expression
 - Complete sentences
 - Correct spelling
 - Correct grammar

Be sure to do regular assigned homework **before** you start this assignment. As this assignment is an extension of regular homework, I will answer questions about regular assigned homework, but will answer only procedural questions on this multiple draft assignment (until the assignment has been completed and returned). Please note that this work should be **professional**. Do not wait until the last minute to do the assignment. Writing proofs (as writing term papers) is an evolutionary process. You need to write a draft, let it sit for a while, re-evaluate and rewrite, and then do it again (and again!). You also need to proof several times, once for mathematics, once for readability, once for spelling/grammar. Then start all over again!