How to Assess Your Classmates' Writing Assignments

You don't have to give a grade, or to correct every error you see. Try to focus on the most important things you notice about the paper, and make constructive comments that will help the writer improve the next draft. You should try to base your comments on the following three criteria.

- **Mathematical Correctness:**

  - Does every step follow logically from the preceding ones?

  - Is the justification for each step clear? (This could mean that the justification is clearly stated, or that it is so obvious that it does not need to be stated.)

  - Is every symbol clearly defined in terms of other well-defined objects, or quantified? (To *quantify* a symbol x means to say "for all x," "for every x," "for some x," "there exists x such that," or an equivalent phrase.)

  - If theorems are used but not proved, are they clearly stated? Are references given for theorems that might not be generally well known by the audience? Does the author make it clear that the hypotheses are satisfied and why?

- **Exposition and Motivation:**

  - Is the paper organized clearly into sentences and paragraphs? Are the sentences clear (not too long or too convoluted or too short)?

  - Is the paper written at the right level for the intended audience?

  - Is there an introduction? Does it provide interesting motivation for why we might want to learn about the ideas? Does it put the result in an appropriate context?

  - Are there clear transitions from one idea to the next? Are formulas interspersed with clarifying text so that they're easy to read and place in context?

  - Is the structure transparent (i.e., is it clear what ideas come first, next, and last, and why the ideas are presented in this order)?

  - Is the main mathematical result clearly stated as a theorem, with its proof clearly delineated? Are lemmas used appropriately?

- **Conventions:**

  - Are the grammar, spelling, punctuation, and usage correct?

  - Are mathematical writing conventions followed correctly?

  - Are symbols used correctly, with every formula playing a grammatical role as part of a complete sentence?

  - Are too many symbols used where English-language descriptions would have been clearer? Conversely, are cumbersome descriptions used where a few well-chosen symbols would have been clearer?