Proof Grading Rubric

Item	0 points	5 points	10 points	15 points	20 points
Use of statements	Few, if any, sentences or expressions are statements.	Some sentences were not statements.	Some sentences were not statements, but the writer appeared to understand the underlying gist.	Some sentences were not statements, but ended up being irrelevant to the proof.	Every sentence and expression used is a statement.
Grammar	Scratch work is presented as a proof.	Many sentences are fragments, or some mathematical expressions are nonsense	Many sentences are fragments or some mathematical expressions are nonsense, but the writer appears to understand the underlying gist.	Some sentences are fragments, but the writer appears to understand the underlying gist.	Everything is a sentence or mathematical statement.
Scope of variables	Some variables are both undefined and overloaded.	Some variables are overloaded and could be one of multiple things.	Some variables are used before they are defined.	Some variables are used before they are defined, but their definition is obvious.	Every variable used is defined before it is used.
Logical Flow	Explicitly or implicitly assumed the conclusion. Or the proof was too sketchy to evaluate.	An important statement, or many statements do not follow from previous statements, or the supposed proof consisted of the correct statements presented in the "wrong direction"	Some statements do not follow from previous statements.	Every correct statement follows from previous statements, but the reader has to fill in some details himself (incorrect statements fall under the next category)	Every correct statement follows from previous statements in a clear manner. (incorrect statements fall under the next category)
Correctness of the idea	Failed to state anything relevant to the conclusion, or attempted to prove the wrong result, or the proof was too sketchy to evaluate.	Some claims are false or unjustified.	Some claims are false or unjustified, but the writer appeared to have an understanding of why the conclusion is true.	Some claims are false or unjustified, but ended up being irrelevant to the proof. Or the main point was missed due to an incorrect logical flow. Or there was an obvious typo that was meaningful and incorrect.	Every claim is mathematically valid, the final claim results in the theorem, and the logical flow was at the 15 or 20 point level.

50/100 – The proof is completely off track or missing, but what is written is written well.

25/100 – The proof is completely off track or missing, but the reader can figure out what the author is trying to do.

Comments are color coded:

Green – things that do not make sense

Blue – things that are incorrect

Orange – things that are mathematically true, but do not follow from what you've said.

Red – all other comments.