

**Summative Assessment in Math 572
Rubric For Grading Proofs**

Statement of Problem (5 points)

0-2	3-4	5
Incorrect statement of problem. May miss half of an “if and only if” or misinterpret what is given or what is to be shown. Might just recopy problem rather than give a precise restatement.	Correct but incomplete statement of the problem. Doesn’t include a statement of either the given or the “to show” or fails to connect them to the diagram.	Correct statement with a labeled diagram and the given and to show stated in terms of the diagram.

Note that an improperly drawn diagram may fall into either the first or second category, depending upon the extent of the error.

Correctness of Proof (15 points)

0-1	2-5	6-9	10-14	15
Mainly incorrect consequences improperly deduced from the given. Little or no sense of how to prove the result.	Unconnected, mostly true statements properly deduced from the given. Listing facts without a sense of how to link them to get a correct proof. May just jump to the conclusion without justification.	Statements linked into a reasonable (though perhaps misguided) attempt to prove the theorem. The proof may be left incomplete or may depend upon a major unjustified leap.	A correct approach to proving the theorem is attempted. Some statements may be unjustified or improperly justified, but errors are minor and could be fixed given time to polish the proof.	A correct and complete proof is given. Some irrelevant information may be included since the time limit precludes polishing up the presentation.

If a proof should have two parts, you should grade each part separately, scaling down the scores above by half (but please make your final answer an integer). If the problem is misstated in a way to significantly change the proof, then reduce the score as appropriate (typically cutting it in half).