## Proof Grading Rubric (Abstract Algebra)

Item		0 points		5 points		10 points		15 points		20 points	
Mathematical Grammar		Scratch work is		Several major issues		Many minor issues, or a		Minor issues, but it's		The proof is well written	
		presented as a proof.		(5 points)		couple major issues.		still clear what was		and typed.	
		Or did not present				(10 points)		intended.		(20 points)	
		enough of the proof to							(15 points)		
		evaluate									
		(0 points)									
Logical Flow		Explicitly or implicitly		An important		Some statements do not		Every correct statement		Every correct statement	
		assumed the conclusion.		statement, or many		follow from previous		follows from previous		follows from previous	
		Or did not realize there		statements do not		statements.		statements, but the		statements in a clear	
		were multiple parts to		follow from previous		Or the reasoning from		reader has to fill in		manner.	
		the proof. Or did not present		statements, or the supposed proof		one statement to the next is not clear.		some minor details himself.		(20 points) (incorrect statements fall under	
		enough of the proof to		consisted of the correct		(10 points)		( 15 points)		the next category)	
		evaluate		statements presented in		(10 points)		(incorrect statements fall under			
		(0 points)		the "wrong direction"				the next category)			
		(o points)		(5 points)							
				(5 points)							
Correctness	Failed to state S		Some claims are		Part of the	The m	main	Some claims a	re	Some claims are	Every claim is
of the idea anything rethe conclusion attempted the wrong (0 points) (The structure does not apply logical flow)		elevant to false or			proof was poi		nt was false or unjust		tified, false or unjustified		l, mathematically valid,
		sion, or unjustified an		nd	missing, but		ssed due	but the writer		but ended up	the final claim results
		to prove the writer did		I not the part that t		to a	an	appeared to have ar		being irrelevant to	in the theorem, and
				was there i		inco	orrect	understanding of		the proof.	the logical flow was
		understand w		•		_	ical flow.	why the conclusion		Or there was an	at the 15 or 20 point
		true.		n is	n is (30 points)		points)	is true.		obvious typo that	level.
								(50 points)		was meaningful	(60 points)
		(20 points)								and incorrect.	
										(55 points)	

40/100 – The proof is completely off track, but shows something of merit.

20/100 – The proof is completely off track, but communicates clearly what the author is doing.

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.

Version 1.6