Week 2 Rubrics

If you encountered a problem like these on an examlet, here's how we would likely grade them.

Table 1: Problem 1.2c (4 points)

Criteria	Mastered (1)	Novice (0)		
Prove or disprove	correctly identified correctness of statement	incorrectly identified correctness of statement		
Criteria	**Mastered (3)**	**Proficient (2)**	**Novice (1)**	**Absent (0)**
Option A: Proof	complete proof	proof is not completely convincing	proof is essentially repeating the claim or gives an example	no proof given
Option B: Counterexample	gives concrete counterexample with explanation of why it is a counterexample	gives concrete counterexample, missing explanation of why it is a counterexample	counterexample given but it is not concrete, or gives explanation but no counterexample	no counterexample or explanation

Table 2: Problem 1.3d (12 points)

Criteria	Mastered (3)	Proficient (2)	Novice (1)	Absent (0)
Variable declaration and type	all variables and types declared	variables declared at beginning *but* missing invocation of this type at the end if it is needed for correctness	variables declared but no types	missing
Definitions and details	key concept definitions are stated correctly when necessary (divides, rational, mod) and other details (algebra) correct	minor error in definitions or algebra	major error in definitions or algebra	definitions or algebra completely incorrect
Flow of logic	flow of logic is good, contrapositive is formed correctly	proof stops one step before claim but contrapositive formed correctly	contrapositive formed incorrectly or other large logical issue	proof assumes claim to be true (largely backwards)
Style and clarity	easy to follow	argument slightly hard to follow	proof very hard to follow due to unnecessary detail/wordiness	very hard to follow (*e.g.,* no connector words)

Table 3: Problem 2.3a (4 points)

Criteria	Mastered (1)	Novice (0)		
True or false	correctly identified correctness of statement	incorrectly identified correctness of statement		
Criteria	**Mastered (3)**	**Proficient (2)**	**Novice (1)**	**Absent (0)**
Option A: justification	complete justification	justification is not completely convincing	justification is essentially repeating the claim or gives an example	no justification given
Option B: Counterexample	gives concrete counterexample with explanation of why it is a counterexample	gives concrete counterexample, missing explanation of why it is a counterexample	counterexample given but it is not concrete, or gives explanation but no counterexample	no counterexample or explanation