Examlet 1 Example Rubrics

Table 1: Direct proof (12 points)

Criteria	Mastered (3)	Proficient (2)	Novice (1)	Absent (0)
Variable declara-	all variables and	variables de-	variables de-	missing
tion and type	types declared	clared at begin-	clared but no	
		ning but missing	types	
		invocation of this		
		type at the end		
		if it is needed for		
		correctness		
Definitions and	key concept defi-	minor error in	major error in	definitions or al-
details	nitions are stated	definitions or al-	definitions or al-	gebra completely
	correctly when	gebra	gebra	incorrect
	necessary (di-			
	vides, rational,			
	mod) and other			
	details (algebra)			
	correct			
Flow of logic	proof begins with	proof stops one	some large issue	proof assumes
	assumptions and	step before claim	with logical flow	claim to be true
	ends with the	or doesn't clearly		(largely back-
	claim	state assump-		wards)
		tions		
Style and clarity	easy to follow	argument slightly	proof hard to	very hard to fol-
		hard to follow	follow due to	low $(e.g., no con-$
			unnecessary de-	nector words)
			tail/wordiness	

Table 2: Forming negation/contrapositive (5 points)

Criteria	Mastered (2)	Acceptable (1)	Novice (0)	
Main negation or contrapositive	the form of the negation or contrapositive is completely correct (e.g., $a \implies b$ becomes $\neg b \implies \neg a$)	very small issue in form (e.g., missed a nega- tion)	form has large issue (e.g., $a \Longrightarrow b$ becomes $b \Longrightarrow a$)	
Criteria	Mastered (3)	Acceptable (2)	Novice (1)	Absent (0)
Details (e.g., quantifier, "not"s)	quantifier is present and cor- rect, all "not"s are handled prop- erly, deMorgan's applied correctly, answer written in words	missing/incorrect quantifier or an- swer not written in words	all "not"s not handled properly or other large incorrect detail	details all incorrect