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