

Examlet 5 Example Rubrics

Table 1: Grammar design (6 points)

Criteria	Mastered (4)	Proficient (3)	Novice (1)	Absent (0)
Production rules	completely correct	small issue with one rule (produces a few incorrect strings/misses a few)	large issue with rules (produces or misses many strings)	rules completely incorrect
Criteria	Mastered (2)	Proficient (1.75)	Novice (1)	Absent (0)
Details	uses the correct format and symbols for a grammar	doesn't mention what start/terminal symbols are	some incorrect formatting/symbols	completely confusing because of formatting

Table 2: Grammar debugging (6 points)

Criteria	Mastered (2)	Novice (0)		
Yes/no answer	correct	incorrect		
Criteria	Mastered (4)	Proficient (3)	Novice (1)	Absent (0)
Explanation	completely correct	minor bugs in explanation or convincing explanation of incorrect answer	unconvincing explanation, or counterexample without explanation, or misunderstood "every single string"	missing

There is a 0.5 point deduction for not using $\text{\LaTeX}$ where it is needed.

Table 3: Tree Induction (16 points)

Criteria	Mastered (2)	Proficient (1)	Absent (0)	
Base case(s)	checks correct values and shows some work	either checks incorrect values or does not show work	neither checks correct values nor shows work; or missing	
Inductive hypothesis	bounds (strong IH) and claim correct, explicitly stated	incorrect bounds or claim (weak IH)	missing or incorrect bounds and claim	
Case structure	cases all covered	small issue with case structure	important case(s) missing	
Details	algebra or other details correct; conclusion is reached	small issue with details, or stops one step before conclusion	large issue with details	
Style and clarity	excellent style, good connector words and formatting	poor formatting or use of words	very difficult to follow	
Criteria	Mastered (3)	Proficient (2)	Novice (1)	Absent (0)
Goal and division of problem	larger problem split correctly into smaller problem(s) and goal matches IH	goal off by one, but split correctly	small issue with split	large issue with split (including missing)
Applying IH	IH applied where necessary with correct values plugged in	IH applied but small issue with values, or doesn't call out IH	missing some case where IH must be applied	IH never applied

Note: Any major issues with dividing the problem will typically also result in errors and points off in other sections (applying IH and details).

There is a 1 point deduction for not using $\LaTeX$ where it is needed.