Examlet 2 Example Rubrics

Table 1: Concrete set computation (2.5 points each part)

| Criteria | Mastered (1.5) | Proficient (1) | Novice (.5) | Absent(0) |
|-------------|--------------------|-------------------|--------------------|-------------------|
| Raw answer | completely cor- | set elements | set elements have | completely incor- |
| | rect/all elements | mostly cor- | large error or set | rect |
| | are correct | rect/set size off | size off by some | |
| | | by one | factor | |
| Criteria | Mastered (1) | Novice (.5) | Absent(0) | |
| Answer form | answer is writ- | small error in | large error in | |
| | ten in the correct | form/answered | form | |
| | form (i.e., set or | wrong question | | |
| | cardinality) | (e.g., gave set) | | |
| | | elements rather | | |
| | | than stating size | | |
| | | of set) | | |

Table 2: Set inclusion proof (15 points)

| Criteria | Mastered (3) | Proficient (2) | Novice (1) | Absent (0) |
|-------------------|--------------------|--------------------------|------------------------|--------------------|
| Variable declara- | all variables | variables de- | missing most | missing all |
| tion and type | declared before | clared but | variable intro- | variable intro- |
| | use (including | missing type; | ductions | ductions |
| | representative | or invocation | | |
| | element) | of type miss- | | |
| | | ing later when needed | | |
| Set definitions | set elements | set elements have | set elements have | set elements com- |
| | follow set defini- | a small error | a large error in | pletely incorrect |
| | tions | | form $(e.g., Z in-$ | |
| | | | stead of Z^2) | |
| Algebraic details | all algebra is | small error | large error | completely incor- |
| | correct (chain | | | rect |
| | of equations | | | |
| | from one set to | | | |
| | another) | | | |
| Proof outline | recommended | proof technique is | proof technique | completely incor- |
| | proof technique | clumsy but math- | has some logical | rect or backwards |
| | is used (choose | ematically sound | errors | |
| | element from | | | |
| | small set and | | | |
| | show it's in big | | | |
| | set) | | | |
| Style and clarity | easy to follow | argument slightly | very hard to fol- | impossible to fol- |
| | | hard to follow | low ($e.g.$, no con- | low |
| | | | nector words) | |