

## Student Guide for POW 14: More from Lewis Carroll

### 1. PROCESS (12 pts)

#### a. Restate the introduction of the POW in your own words

- 0 – No introduction stated
- 1 – Introduction is copied from text
- 2 – Introduction is partially restated and partially copied
- 3 – Introduction is restated but lacks some necessary information
- 4 – Introduction was written in students own words and includes all necessary information

#### b. Describe any knowledge you have of Lewis Carroll or his writings

- 0 – No information given
- 1 – A few general pieces of information about Lewis Carroll, mostly indicating his additional writings
- 2 – Several pieces of specific information presented about Lewis Carroll's life and/or interests and his writings

#### c. Describe your initial ideas about making deductions

- 0 – No initial ideas expressed
- 1 - Poorly written/incomplete/vague statement of ideas
- 2 - Complete and thorough explanation of initial ideas

#### d. Describe any problems you had, and how you solved them

- 0 – No description of problems encountered
- 1 – Vague and limited discussion of problems encountered
- 2 – Excellent discussion of several problems encountered, including a thorough record or your thought process used to deal with the problems

#### e. Describe all assistance provided and how it helped you

- 0 – No statement of assistance
- 1 – Clear statement of assistance with minimal description of how it helped
- 2 – Clear statement of assistance with a complete description of how it helped

### 2. RESULTS (18 pts)

#### a. State the conclusions with explanation for Part One (questions 1-6)

- 0 – No answer given or all incorrect answers
- 2 – One correct answer with an appropriate explanation
- 4 – Two correct answers with appropriate explanations
- 6 – Three correct answers with appropriate explanations
- 8- Four correct answers with appropriate explanations
- 10 – Five correct answers with appropriate explanations
- 12- Six correct answers with appropriate explanations

#### b. Provide all diagrams and sketches for Part One (questions 1-6)

- 0 – No diagrams provided
- 1 - Poor diagrams with little if any labels/explanations/comments
- 2 - Complete diagrams with clear and concise labels/explanations/comments

#### c. Write two sets of statements, one that has a valid conclusion and one does not have a valid conclusion, and explain why they have are or are not valid conclusions (Part II)

- 0 – No sets of statements written
- 2 – One set of statement correctly written for being valid or not being valid with an appropriate explanation
- 4 – Both sets of statements correctly written for both, being valid and not being valid,

with appropriate explanations

**3. EVALUATION (12 pts)**

**a. State the difficulty level of the problem (scale of 1-10), explain**

- 0 - no explanation of level
- 1 - minimal explanation of level
- 2 - Complete and thorough explanation of level selected

**b. Describe your personal reaction/opinion to the problem**

- 0 - no opinion or reaction stated
- 1 - a minimal statement with little support
- 2 - a well discussed statement of opinion/reaction

**c. Identify the best/worst parts of the problem**

- 0 - no identification of best/worst parts of exp
- 1 - minimal listing of best/worst parts of exp
- 2 - Complete and thorough listing of best/worst parts of exp

**d. Describe how the problem could have been made better for you**

- 0 - No description on the problem could have been improved
- 1 - A vague and limited statement how the problem could have been improved
- 2 - Several, well-support comments and suggestions regarding improvement

**e. Write a one paragraph summary of “what does this POW have to do with mathematics”**

- 0 - No summary paragraph
- 1. A brief, poorly written summary that demonstrates little understanding of the problem, its solution and the mathematical ideas and concepts
- 2. A fair summary that includes some support, but lacks one or two key points that would have demonstrated understanding of the problem, its solution, and the mathematical ideas and concepts
- 3. A good summary that demonstrates an acceptable understanding of the problem, its solution and the mathematical ideas and concepts, however could be described in greater detail
- 4. A well written summary written that demonstrates a thorough understanding of the problem, its solution and the mathematical ideas and concepts

**4. SELF-ASSESSMENT (8 pts)**

**a. Grade and Justify your work using a self-assessment scoring rubric**

- 0 - Work not graded with rubric
- 1 - Score values provide with no justification
- 2 - Score values provide with minimal rationale and many/most values not acceptable based on scoring guide criteria
- 3 - Scores values provided with fair/good rationales, but some values not acceptable based on scoring guide criteria
- 4 - Score values provided with strong rationales, all values acceptable based on scoring guide criteria

**b. Write a one paragraph summary that identifies your weakest areas in this POW and describe the problems you had or the reasons you become “stuck” in these areas**

- 0 - No paragraph written
- 1 - A brief, poorly written summary that does not allow the reader the ability to understand why you had problems in specific areas of the POW and could not finish a problem, come to a solution, or make a generalization
- 2. A fair summary that is quite limited, and does not go into detail on problem areas and

their specific reasons

4. A well written summary written that clearly identifies the weakest areas of the POW and describe the specific reasons that you had problems and how you will try to resolve these problems