

## MATHEMATICS PROJECTS – Use as a guideline to determine if a presentation meets the necessary requirements.

Mathematics Projects are judged on the following five criteria.

### FULLFILLMENT OF PURPOSE

- a) Did the presentation have focus?
- b) Considering the topic and time allowed, was the scope of the presentation suitable?
- c) Did the student use appropriate mathematical vocabulary?
- d) Did the student show depth of understanding of mathematical concepts and principles?

### CONTENT

- a) Did the presentation have specific and illustrative content?
- b) Was the presentation free from mathematical errors?
- c) Is there a practical application or correlation or interaction with other disciplines?
- d) Did the student use correct mathematical notation?

### DEVELOPMENT

- a) Was there unity, coherence and inherent logic in the sequence of ideas?
- b) Does the student show insight?
- c) Does the student show sufficient examples or counter-examples?
- d) Can the student make suggestions as to related topics needing further investigation?

### PRESENTATION

The presentation should, preferably, be in the form of a free talk employing good oral communication skills. The time restrictions in the rules necessitate planning and rehearsal.

- a) Is the talk well organized and flowing in a logical pattern?
- b) Do the audiovisual aids enhance the audience's understanding?
- c) Did the presenter speak clearly and refer to notecards rather than read from them?
- d) Is the quality of exposition of a high degree?
- e) Is the student's competency with the principals such that he can answer questions with clarity, and elaborate where necessary to make a point?

### JUDGE'S OPINION

This criterion is an overall subjective evaluation of the student's work considering age level, depth, complexity of the subject matter, as well as the student's success in achieving his purpose or objective.

### SCORING

- Judges score the student on their individual worksheets after each presentation.
- The student is rated numerically by his success in each of 5 independently-evaluated criteria. For each of the 5 criteria the lowest score is 1, the highest score is 5. Use integer scores only.
- Students are not in competition with each other for some single top award; rather they are evaluated on how well they succeed in fulfilling the 5 criteria. Therefore, there is no limit to the number of each award that may be awarded in a given Presentation Room.
- PJAS Awards are based on the average of all judges' scores

Average	Award
4.0 or higher	First Place Award
3.0 – 3.99	Second Place Award
Below 3.0	Third Place Award

### SCORING RUBRIC

Exceeds Characteristics	5
Meets ALL of the Characteristics	4
Meets MOST of the Characteristics	3
Meets FEW of the Characteristics	2
Meets NONE of the Characteristics	1