

# **Summary of DuKane Conference Competition**

## **\*Acceptable Answers**

### **Individuals (Alg I, Geom, Alg II, Pre-Calc)**

**Team Make-up:** maximum 6 students

**Questions:** 10

**Time:** 25 minutes

### **Topics**

**Format:** Individual competition. All battery operated calculators permitted, including CAS-type.

*All rational answers that are not integers should be written as simplified common or improper fractions unless otherwise indicated in the question.*

**Scoring:** Correct answers worth 2 points each.

### **Calculator Team**

**Team Make-up:** maximum 8 students (2 freshmen; 2 freshman or sophomore; 2 freshman, sophomore, or junior; 2 students from any grade)

**Questions:** 20

**Time:** 20 minutes

**Format:** Team members work together and submit one answer sheet. All battery operated calculators permitted, including CAS-type. Students may use more than one calculator

*Answers must be rounded to 4 significant digits unless otherwise indicated in the question. Answers must be simplified and in the specific form if so stated. Except where noted, angles are in radians. Answers must be in standard notation. Do not use scientific notation unless specified in the question.*

**Scoring:** Correct answers are worth 2.5 points each.

### **8-Person Team**

**Team Make-up:** maximum 8 students (no more than 4 sophs/4 seniors)

**Questions:** 20

**Time:** 20 minutes

**Format:** Team members work together and submit one answer sheet. NO Calculators permitted.

*All rational answers that are not integers should be written as simplified common or improper fractions unless otherwise indicated in the question.*

**Scoring:** Correct answers are worth 2.5 points each.

### **2-Person Team**

**Team Make-up:** maximum 2 students, any grade level

**Questions:** 6

- Questions 1-3: NO Calculators permitted
- Questions 4-6: All battery operated calculators permitted, including CAS-type

**Time:** 3 minutes per question

**Format:** Team members work together and submit one answer sheet. All rational answers that are not integers should be written as simplified common or improper fractions unless otherwise indicated in the question.

**Scoring:** Correct answers submitted in the 1st minute are worth 6 points; correct answers submitted in the 2nd minute are worth 4 points; correct answers submitted in the 3rd minute are worth 3 points; the first team with the correct answer to each question earns a 2 point bonus.

### **Oralists**

**Team Make-up:** maximum 2 students, any grade level

**Preparation Time:** 10 minutes (students may work together and use any resource materials)

**Presentation:** 7 minutes for the initial presentation; 3 minutes for the extemporaneous questions.

**Format:** During the first 7 minutes, students will present the solutions to the judges, using only the notes prepared in the preparation room. At the end of the 7 minutes, the students will be handed a copy of the extemporaneous questions. During this event, either or both students may participate in the presentation. It is up to the students to determine if, or how, they will collaborate on the presentation and/or extemporaneous questions.

All battery operated calculators permitted, including CAS-type in the preparation room only

**Scoring:** Students will be judged on knowledge, presentation and extemporaneous questions;

**Each judge will award up to 25 points per team:**

- Knowledge is worth 0-13 points
- Presentation is worth 0-8 points
- Extemporaneous questions are worth 0-4 points.
- Scores from the two judges will be added for a maximum of 50 points per team.

### **Candy Bar Contest**

**Team Make-up:** Whole team/school

**Questions:** 20

**Time:** 20 minutes

**Format:** Team members work together and submit one answer sheet. Calculators are permitted.

All rational answers that are not integers should be written as simplified common or improper fractions unless otherwise indicated in the question.