

2017 Oral Topics

Division A: Coordinate Geometry

The reference will be available on the school login section of the website approximately October 31.

Regionals: Lines

Slope, graphing a line, finding x and y intercepts, slopes of parallel and perpendicular lines, writing equations of lines, distance between two points, midpoint of a segment, finding intersections of lines, transformations (translations, reflections), area, perimeter

State: Lines, Circles, Parabolas

Transformations (dilations, rotations), distance point to a line, piece-wise functions, domain and range, finding center and radius of circle, graph circles, writing equation of circle, graphing parabolas, finding max/min for parabolas

Division AA: Logic and Logic Circuits

Reference: Schaum's Outlines

"Boolean Algebra and Switching Circuits"

Elliott Mendelson, 1970

ISBN 07-041460-2

Regionals: The Algebra of Logic

Chapter 1, pgs 1-29

State: Switching and Logic Circuits

Chapter 4, Sections 4.1 – 4.4, pgs 71-77

with supplementary problems at the end of the chapter

For both divisions: Note that any regional material may also be included in the state finals

Based on feedback from 2016, teams will be allowed to have both students take part in the presentation. Both students may, but are not required to, participate in all parts of the presentation. Judges will be informed that while both students may speak during the presentation, teams who decide to have a single student do the presentation should not be penalized, and questions will not be written so as to require both students to participate.