CCML Topics Amendments for 2016-2017

Overall

- Please remember that contest topics are cumulative of earlier topics. For example, topics from Geometry show up on Precalculus.

Algebra 1

- "Number bases" has been moved from contest 3 to contest 2.
- "Basic statistics, including mean, median, mode" has been moved from contest 2 to contest 3.
- "Solving quadratic equations and applications" remains on contest 5, but it is now a division A topic only. It shows up on Geometry contest 1 for all divisions, so it has also been added there.

Geometry

- In the past, there were several instances of a topic showing up on contest n for division A only and on contest $n + 1$ for all divisions. We have done away with this, generally reserving the topic for the later contest for all divisions. The one exception is "Circles (chord/secant/tangent length relationships)." This was originally only for division A on contest 4, and it is now a topic for all divisions on contest 4.
- The topic "Pythagorean triples" has been renamed "Pythagorean theorem (including Pythagorean triples, applications, etc.)."

Algebra 2

- The topic "Statistics (measures of central tendency, two-way frequency tables, regression curves, etc.)" has been moved from contest 2 to contest 3. Given that it now shows up on a calculator-allowed contest, it is important that students know how to utilize statistics features on their calculators. For instance, a student might be expected to determine a line of best fit for a data set.
- The topic "Matrix Algebra" has been renamed "Matrix algebra and determinants (up to 2 x 2 for determinants)" to explicitly indicate that determinants (and associated notation) may show up.

Precalculus

- The topic "Limits (easy limits, end behavior, etc.)" has been moved from contest 5 to contest 2 to, as it fits well with the topic "Polynomials and rational functions (and their graphs)." Students may see limit notation, so they should be familiar with this going into the contest.
- The topic "Statistics - measures of central tendency, standard deviation" has been moved from contest 2 to contest 3. Students should be familiar with the relevant calculator features for this topic.
- The topic "Probability - independent and dependent events, conditional probability" has been renamed "Probability - independent and dependent events, conditional probability, Bayes theorem, expected value" to further emphasize those additional topics.

- The topic "Matrices (operations, inverses, determinants)" has been renamed "Matrices (operations, inverses, determinants up to 3 x 3)" to emphasize that students are expected to be able to compute the determinant of a 3 x 3 matrix.
- The topic "Binomial Theorem" has been removed from contest 3 as a division A topic. It shows up in contest 5 for all divisions, though it has been renamed "Binomial theorem and binomial probability."