Topics 2015-2016
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| Meet | Category 1 <br> MYSTERY | Category 2 <br> GEOMETRY | Category 3 <br> NUMBER THEORY | Category 4 ARITHMETIC | Category 5 <br> ALGEBRA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $?$ | Angle measures in plane figures including supplements and complements | Divisibility rules, factors, primes, composites | Order of operations; mean, median, mode; rounding; statistics | Simplifying and evaluating expressions; solving equations with 1 unknown including identities |
| 2 | $?$ | Area and perimeter of polygons | GCF, LCM, prime factorization | Fractions, terminating and repeating decimals, percents | Word problems with 1 unknown; working with formulas; reasoning in number sentences |
| 3 | $?$ | Properties of polygons; Pythagorean Theorem | Bases, scientific notation | Integral powers (positive, negative, and zero), roots up to the sixth | Absolute value; inequalities in one variable including interpreting line graphs |
| 4 <br> calculator meet | $?$ | Properties of circles | Modular arithmetic, series and sequences | Percent applications Percent change Compound interest | Word problems (linear, including direct proportions or systems) |
| 5 <br> calculator meet | $?$ | Solid geometry (volume and surface area) | Set theory, Venn diagrams | Combinatorics and Probability | Solving quadratics with rational solutions, including word problems |

- Team round may include coordinate plane transformational geometry.
- Acceptable Answer Formats:
- All money answers must be written with 2 decimal places.
- A common fraction is written $a s a / b$ where $a$ and $b$ are natural numbers with no common factors. a may or may not be greater than $b$.
- Unnecessary zeros written at the end of a decimal will be marked incorrect.
- Calculators will be allowed in both meets 4 and 5. Please provide them for your team members.
- Programmable/graphing calculators are not allowed.

