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Within each category, problems are listed according to competition (ARML or NYSML); year; type (Team, Individual, or Relay); number. Tiebreakers are listed as TB# (see section on Tiebreakers). For example, "A92T4" refers to ARML 1992, Team Question #4. Classification is generally by topic, rather than by method of solution, and some problems are listed under more than one category.

Algebra

Binomial expansion (see also Combinatorics): A93I6, A94T1 Complex numbers: N91T9, A91T8, A92T8, A92R1-2, A94I6, TB1 Equations, solving (see also Theory of Equations): absolute value: A91T5, N92T7 cubic: N92T10 integer (see also Number Theory: Diophantine equations): A89T1, A8911, A9211, A9311 polynomial of degree four or more: A89I3 quadratic: N9112, A91R2-1, N92I7, N92R1-3, A92T4, TB13, TB23 radical: A89R1-1 systems (of): N89I4, N90I2, N90I3, N9116, A9111 miscellaneous: N90T1, A90I7, A91T4, A93I7 Extreme values (maximum-minimum problems): A90I3, A90I7, TB5 Factorization of polynomials: N89I2 Functions and functional relations: N91T6, A94T9 Greatest integer function: A89I6, A90R1-3, N91R2-1, A91I5, A94I3,

Inequalities: A89R2-1, A90I2

Limits: N89T2

Logarithms: A89R2-2, N90T3, A90I5, A91R1-2, N92R1-1, A92R2-2, A93R2-1, TB5, TB16, TB19 Means: A93T8, A93I3 Recursion and iteration: A92R2-3 Sequences and series: arithmetic: N89I5, A91I3, N92T9, N92I6, TB24 geometric: A94I8 miscellaneous: N89T8, N89I5, N90T6, A90T9, A91T7, A92I4, A94R1-3, TB6, TB9 Miscellaneous topics: arithmetical or computational: N89R1-1, A89T2, N90T4, N90R1-1, A90T1, A90I1, A90R1-2, A90R2-2, N9113, A91T2, A92I2, A92T7, A93T1, A93R1-1, A93R1-2, A94I5, A94R1-1 assorted algebraic techniques: N89T7, A89T6, N90I8, A90T7, A91I2, N92I3, N92R2-2, N92R2-3, A93I6, A93R2-3, A94R1-2, A94R2-1, TB3, TB21 various word problems: N89R2-4,

Analytic Geometry

Lattice points: A91R2-3, A92I5, TB22 Problems, involving conics: N89T3, N91T1, A92T2, A94T6, A94I7, A94R2-3, TB26

A90T4, N91T3, A94T7, A94I8

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Problems involving triangles in the coordinate plane: N89R2-3, N90I4, A91I4, N92T2, N92R2-1, A93R2-2 Properties of graphs: N89R2-2, A91I6, A92I7, A94T5, TB10 Solid coordinate geometry: A90T2, N92T8, A92T10, A93T9 Miscellaneous: A89T7, N92I4, N92R1-2, A93I2, TB12, TB14, TB20

Combinatorics and Probability

Binomial coefficients: N89I5 Permutations and combinations: N90T8, A90T6, N91T5, N91R1-2, A91T3, A92T1, A93T4

Probability: N89R1-3, A89T5, N91T7, A93T7

Miscellaneous: A91T1

Geometry

Angle measurement: N91I4, TB2 Area relationships: A90I8, A90R1-1 Circles:

tangents: N89I3, A89T10, N91T8, A91R2-2, N92I8, A92T9, A93T5, A93R1-3, A94T2, TB15

miscellaneous: N89I1, A89T8, A89I8, A89R2-3, N90T2, N90R1-2, N90R2-3, N92T10

Extreme values (geometric maximumminimum problems): A91R1-3

Polygons other than triangles or quadrilaterals: N91T2, N92T10, A93I4

Pythagorean Theorem and right triangle relationships: N91R2-3

Quadrilaterals (special and otherwise): A8912, N90T9, N90I6, A90T8, A91T9, A92T3, A92I2, A94I2

Solid geometry: A89R1-2, A90T5, A90R2-1, A92R1-3, A94T10 Triangles:

(problems involving) altitudes, angle bisectors, medians, or perpendicular bisectors: N89T5, A89T4, N92T1, A92T6, A92I8, A94T4, A94R2-2, TB4, TB11

angle measurement: N89R1-4 associated circles: N91R1-3, TB4 miscellaneous: N90T10, A90R2-3, N91R2-2, A91I7 Transformations: N89I7, N89R2-5, N90I7, **TB25** Miscellaneous: A89T9, N91I7, N92I5, A94T8, A94I4

Number Theory

Bases: N89R1-2, A89I7, A94T3 Diophantine equations (see also Algebra: Equations): A92I3, A93I1 Divisibility factorization, and primes: N89T1, N89T4, N89R1-5, N89R2-1, A89T2, A89T3, A89R1-3, N90T5, N90T7, N90I1, N90R1-3, N90R2-2, A90I4, N91I1, N91I8, A91I8, A91R1-1, N92T3, N92T4, N92T5, N92T6, A92R1-1, A92R2-1, A93T6, A94T6, TB18, TB29 Fibonacci numbers: N90T6, A93T10 Pythagorean triples: N92I1 Miscellaneous: A90T3, A90T7, A91T10, A9318, A9415, TB28

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(Functions involving) sums, differences, multiples, or submultiples of angles: N89I6, A90T10, A90I6, N91R1-1

Problems having an algebraic setting: N92I6

Problems having a geometric setting: N89T6, N89I8, N90R2-1, N91T10, N9115, A91T6, A91I3, A92I6, A93T2 Trigonometric equations: N89I6, A92T5,

A93T3, TB8, TB17

Miscellaneous: A89I4, A93I5

Miscellaneous

Set theory: N89T9, TB27 Miscellaneous: A94I1