Real Analysis & Topology (Q1–2, 4–6, 44–46, 57–58, 60): A strong recurring thread — sets, sequences, continuity, uniform continuity, compactness, completeness, and metric spaces. Tests deep conceptual rigor (epsilon-delta arguments, convergence).

Abstract Algebra (Q7–12, 79): Groups, subgroups, cyclic groups, rings, ideals, permutations — a well-defined block emphasizing structural/group-theoretic reasoning.

Linear Algebra & Vector Spaces (Q32, 37–38, 53, 59, 61–62, 95): Matrices, vector spaces, subspaces, basis/dimension, and matrix properties — a moderate but consistent cluster.

Complex Analysis (Q21–23, 26–27, 43, 63–68): A substantial block — complex roots, Cauchy-Riemann equations, poles/singularities, contour integration, and complex exponentials.

Calculus (Single & Multivariable) (Q13–19, 42, 69–72, 81, 90, 96): One of the largest clusters — double/triple integrals, directional derivatives, gradient operators, volumes of revolution, and vector calculus identities.

Differential Equations (Q30, 80, 87–89): ODEs and PDEs — linear equations with constant coefficients, initial value problems, and first-order PDEs via characteristics.

Coordinate Geometry & Conics (Q75–78, 91, 93–94, 98–100): 3D geometry (planes, lines, spheres, cones), conic sections, and canonical forms — a solid geometry-focused block.

Numerical Methods & Optimization (Q40, 73–74, 52–53): Forward differences, bisection method, numerical differentiation, and linear programming — a small applied-math thread.

Probability & Number Theory (Q28–29, 47–51, 54–56, 97): Modular arithmetic, Euler's phi function, discrete probability distributions, and combinatorics — a distinct applied cluster.

Mechanics (Q84–86): Moment of inertia, rigid body dynamics, pendulum motion — a small but notable applied-physics segment.

Key trends noticed:

- **Real analysis and complex analysis together form the backbone**, suggesting strong emphasis on rigorous mathematical foundations
- **Calculus (multivariable/vector) and differential equations are heavily applied-computation-based**, balancing the abstract theory sections.
- Small but precise inclusion of **numerical methods, optimization, and mechanics** shows an intent to test applied mathematical versatility, not just pure theory.