PHOENIX CLUB PRESENTS

# DISSCUSION SERIES IN MATHEMATICS

SESSION I COMBINATORICS

## TOPICS

Week 1: Permutations & Combinations, Pigeonhole Principle

Week 2: Generating Permutations & Combinations, The Binomial Coefficients

Week 3: The Inclusion-Exclusion Principle

Week 4: Recurrence Relations and Generating Functions

Week 5: Special Counting Sequences

Week 6: Systems of Distinct Representatives, Combinatorial Designs

- Meeting: two times a week (time/location TBA)
- This is a student led discussion series.
- This is not a YSU course, but will be conducted formally like a rigorous two credit course.
- Emphasis will be given to an in-depth understanding of the topics and problem solving.

**WANT TO LEARN MORE?**

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