

## 2024-25 Academic Pentathlon Mathematics Resource Guide Outline

Section I. Probability, Permutations and Combinations.....24%

- A. Probability
- B. Probability
- C. Combinations

Section II. Statistics.....27%

- A. Measures of Central Tendency
- B. Organizing and Displaying Data
- C. Sequences

Section III. Algebra.....49%

- A. Basic Terms in Set Theory
- B. Sets of Numbers
- C. Exponents and Roots
- D. Variables and Algebraic Expressions
- E. Equations
- F. Ratios and Proportions
- G. Monomials and Polynomials
- H. Factoring
- I. Solving Quadratic Equations
- J. Inequalities