



January 9, 2023

Dear Cadet Candidate:

On behalf of your future math instructor and the entire team in the Department of Mathematical Sciences, congratulations, and welcome to the West Point Class of 2027! We look forward to providing you a challenging course of study to enable success in your math, science, and engineering courses. What follows in this letter are expectations, resources, and recommendations to prepare you for this endeavor.

REQUIRED KNOWLEDGE: Your success in college-level math, science, and engineering courses depends on a firm understanding of pre-calculus material. All students entering the academic program at West Point must possess a core set of math skills to effectively advance their learning. Our experience indicates that if students lack a good understanding of these concepts, then they will struggle to perform to their full potential. A list of these mathematical skills and concepts can be found under the link titled "Required Knowledge for Entering Cadets" at:

www.westpoint.edu/academics/academic-departments/mathematical-sciences/prospective-students.

Also, at this website you will find a link titled "Useful Formulas." You are expected to **recall, fully understand, and employ** all information listed on pages 1-2 throughout your mathematics curriculum at West Point. This information should be second nature to you and available for immediate recall.

FUNDAMENTAL CONCEPTS EXAM: To assess your knowledge of mathematical fundamentals and determine your initial math course enrollment at West Point, you will take a fundamental concepts placement exam prior to arrival. Details on the administration of this exam will be provided through your admissions portal. Although most students will be enrolled in MA103 (Mathematical Modeling and Introduction to Calculus), many will have the opportunity to enroll in MA153 (Mathematical Modeling and Introduction to Differential Equations). Students who demonstrate lower levels of fundamental proficiency may be placed in MA100 (Pre-Calculus) during their first semester. Enrollment in MA100 requires students to take a minimum of four math courses as part of the core graduation requirement instead of the standard minimum of three.

Regardless of placement, all Cadets must demonstrate proficiency in these skills (indicated by a score of 80% or better) during an in-class proctored exam during the early days of the fall semester. Cadets who fail to demonstrate proficiency will be formally counseled on resources to shore up identified deficiencies and may be recommended for enrollment in MA100 prior to follow-on mathematical coursework.

SELF ASSESSMENT: The Prospective Students website contains several links to practice exams (along with solutions), worksheets, and resources to assist you in reviewing the required math knowledge. At some point before your arrival, we **strongly** suggest that you self-administer at least one of these exams to assess your abilities. You should seek remedial assistance in any area in which you feel like your skills are weak.

The requirement to meet the defined level of proficiency on fundamental skills should not be taken lightly. Time spent mastering these skills now will save much time during the first semester when you will need it for other courses and will potentially help you avoid having to enroll in summer school classes. Please feel free to contact me if you have questions or concerns with information contained in this letter at (845)938-7436 or joseph.lindquist@westpoint.edu. We wish you the best of luck as you make final preparations for this incredible 47-month journey at West Point.

Sincerely,

JOSEPH M. LINDQUIST
Colonel, US Army
Plebe Math Program Director