

# **Integrated Math III+**

## **2023-2024**

It is my pleasure to welcome you to Integrated Math III+! This will likely be the richest year of mathematics that you have encountered in your academic careers, and I am thrilled to be your guide and companion on the journey ahead!

In Integrated III+, we aim to apply and extend what you have learned in previous courses by focusing on finding connections between multiple representations of functions, transformations of different function families, finding zeros of polynomials and connecting them to graphs and equations, and modeling and understanding periodic phenomena with trigonometry. In addition, we will be working on the key concepts found in precalculus including extending periodic functions and their graphs, series, inverses, exponentials, and logarithmic equations and applications, introduction to limits, introduction to average rates of change and instantaneous rates of change as a foundation for derivatives. On a daily basis, we will use problem-solving strategies, questioning, investigating, analyzing critically, and gathering and constructing evidence. You will be expected to communicate rigorous arguments and justify your thinking via oral and written communication. You will be expected to collaborate with others sharing information, expertise, and ideas.

### **Textbook and Online Resources**

We will be using the CPM (College Preparatory Mathematics) Integrated Math III and CPM Precalculus textbooks. Most assignments will come from these books. You will have access to an online eBook as well as a hardcopy book you can keep at home. The eBooks can be accessed at: [ebooks.cpm.org](http://ebooks.cpm.org) Be sure to bookmark them for easy reference. Homework help for both courses can be accessed from inside the eBooks and daily agendas and all assignments will be available through Canvas.

### **Material:**

The Basics: You will need lined paper, graph paper, ruler, pencils, and erasers. You will need a binder to organize your work. Organization is key!

Calculators: It is recommended, but not required, to acquire a graphing calculator for this course. You will have a laptop computer available and can download a graphing calculator simulator if desired. If purchasing a graphing calculator, the TI-84 Plus is recommended. These are usually on sale in the fall at Target or OfficeMax. You can also find good used ones on Craig's list or similar websites.

### **Classwork/Homework**

Classwork and homework are a single assignment. Classwork is generally exploratory/inquiry based. It is time to try out different approaches and ask lots of questions of your team and/or teacher. The homework portion is about reflecting on what you worked on in class, some individual practice time, and finding areas that need further clarification. Practice is an important part of developing your math skills; make sure you find time every day to work on your math assignments. Assignments need to be completed in a timely manner so you can address misunderstandings, contribute to class discussions, and participate fully in class activities. You will be expected to be proactive about asking questions and clarifying your understanding. There are lots of online resources that can be helpful. I have linked a few on our Canvas agenda homepage.

### **Assessments**

Tests, quizzes, exit tickets, journals and projects are chances for you to show what you have learned. Each unit will include at least one quiz and will culminate in a unit test or project. Corrections are expected to be completed after every summative assessment and an opportunity to retake assessments will be available. Directions for completing corrections are available on Canvas. Generally, corrections will be due within two weeks of the return of an assessment.

### **Grade Breakdown**

Curricular Literacy	The ability to use knowledge and understanding of the concepts included in our current mathematics standards.	35%
Critical Thinking	Use higher order thinking skills including evaluation, synthesis, and problem solving. Thinking analytically and creatively, using logical reasoning, and interpreting information.	30%
Communication	Effectively communicate knowledge and thinking through written and oral communication by organizing and structuring ideas and using appropriate mathematical language and conventions.	20%
Learning Mindset	You will build intelligence and skills through effort, practice, and solicitation of feedback, revision, and seeking challenge. You are expected to explore your mistakes and misconceptions and revise your work showing an improved understanding of the content.	5%
Collaboration	The ability to be a productive team member of diverse teams through strong interpersonal communication, and a commitment to sharing ideas and thinking.	5%
Professionalism	Classwork, homework, and other assignments must be completed in a timely manner and kept organized in chronological order.	5%

### **Communication and Feedback**

It is your responsibility to stay up to date on your work by regularly checking Canvas and asking questions in class. I am available to discuss any questions you may have throughout the course. Please feel free to contact me via email or stop by at lunch or after school. Please check with me ahead of time on my availability after school. There are electronic resources embedded in your online textbook and linked on our Canvas homepage for this class. Get contact information for your teammates or a friend in class. Other resources on campus include Homework Club and Peer Tutoring.

I am looking forward to a great year with you!

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