

AP Calculus AB

#### Disclaimer:

 AP Calculus AB is a difficult class in many ways and an easy class in others.
 If you have prepared by learning the material in prerequisite classes and are willing to try new things, AP Calculus AB will be an amazing, fun, rewarding class.

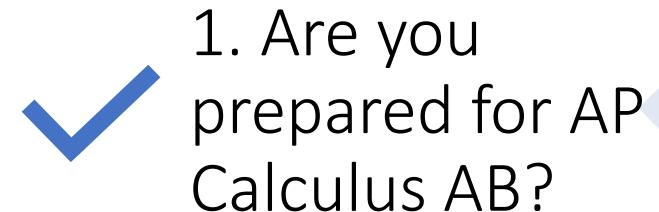
### AP Calculus AB Night Topics:

1. The decision – Are you prepared for AB Calculus?

2. Acceptable sequences of prerequisite classes.

3. What happens in AP Calculus AB?

4. What is the next step?



### 1. Are you prepared for AP Calculus AB?

- You must understand the following:
  - Success in AP Calculus AB will be different than other math classes.
  - All of your high school math has been lower level skills that will be used in AP Calculus AB.
  - You will not only have to find answers, you will have to be organized, be able to explain your work, and be willing to collaborate.
  - If you are not willing to talk, ask questions, or make mistakes, you will struggle in AP Calculus AB.
  - AP Calculus AB is University Freshman Level Class (meant to be a UC equivalent).

### 1. Are you prepared for AP Calculus AB?

The information on the next slide is what you will need to be able to do. I will help you
and teach you to do all of these things. You need to know that things will probably be
different than you are used to.

### 1. Are you prepared for AP Calculus AB?

- AP Calculus AB is different than any math class you've taken before:
  - a high grade should not be your highest priority
  - level of understanding is the goal
  - your grade will reflect what you show that you can do
  - More speaking than you have ever had in the past.
    - You must be able to speak about the math to be successful on the AP test, so you must practice in class
    - Nothing will be interpreted. You will need to be more precise than you ever thought was necessary.
  - Your answers are not as important as your work and your thought process.
    - You must be able to show and explain your work.
    - A correct answer may not even be counted if you lack the supporting evidence for your answer.

## 2. Acceptable sequences of prerequisite classes.

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College Board has prerequisite classes that must be completed before enrollment in AP Calculus AB. Below is the sequence of classes that is recommended.

Integrated Math 1

Integrated Math 2H (at Ayala)

Integrated Math 3H (at Ayala)

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Note: IM2H and IM3H at Ayala cover standards and topics of Integrated Math2, Integrated Math 3, and Pre-Calculus. Honors math classes outside of Ayala do not cover pre-calculus, and therefore are not sufficient to prepare you for AP Calculus AB

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Integrated Math 1

Integrated Math 2 (or honors)

Integrated Math 3 (or honors)

Pre-Calculus (or honors)

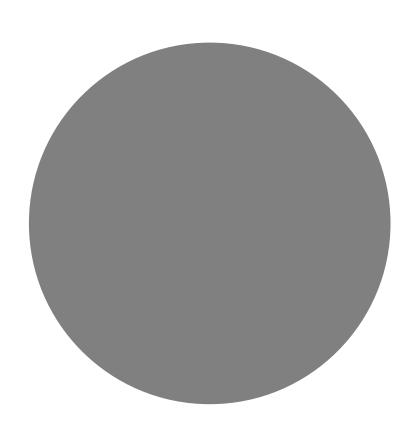
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### 2. What you must know before beginning AP Calculus AB Topics including, but not limited to:

- Linear Functions
- Polynomial Functions
- Rational Functions
- Exponential Functions
- Logarithmic Functions
- Trigonometric Functions
- Inverse Functions
- Graphing

- Asymptotic Behavior
- End Behavior
- Plane and 3-D Geometry
- Mathematical Modeling
- Proofs

3. What happens in AP Calculus AB



### 3. What happens in AP Calculus AB?

1

You will learn and practice new skills and concepts like most math classes that you are accustomed to. You will have nightly independent practice like you are used to as well. 2

You will have many more applications (word problems) putting the calculus into real world problems. You will see how the math is actually useful.

3

You will learn to organize, show all work, and justify what you are doing. Half of the AP test is free response where you will have to do these same things.

4. What is the next step? Are you ready?

#### 4. What is the next step? Are you ready?

- Are you on track to successfully complete one of the College Board sequences of classes listed in the previous pages?
- Are you confident in your ability to use all that knowledge from your previous math classes?
- Are you willing to commit to putting in the necessary time and effort next year?

### 4. What is the next step? Do I qualify?

- Complete the AP registration by the deadline.
- Please speak to your current Math 3H teacher about whether or not AP Calculus is the right class for you next year if you aren't sure.
- Think about what classes you want to take. Don't overwhelm yourself next year.
   Will you have enough time with your other commitments like sports, activities, or band?
- After registration, math teachers and counselors will be reviewing your transcripts to make sure that you have completed one of the sequences of prerequisite classes.