Summer Assignments

AP Calculus AB

Episcopal Collegiate School

FINDING MY **VOICE**
FINDING MY **PLACE**

Due: First Day of Class

As a resource for our study of Calculus please prepare a mind map for each of the major **functions** listed below. We will spend our year applying Calculus concepts to all of these functions and so you will benefit from having a solid understanding of each of them.

Required Details

At the very minimum, you should have one page per function.

- Identify key properties or concepts for each function (for example the domain for all polynomials is all real numbers or exponential functions are either always increasing or always decreasing)
- Graphs of the functions
- Any special values, formulas, different forms of the function or terms/vocabulary that might be associated with each function

Directions

Step 1: Watch the video *How to create a mind map*

Step 2: Brainstorm what you know about each of the **functions**.

Step 3: Do a little research to learn even more or fill in any gaps. You are welcome to use online resources but please be sure to cite your sources.

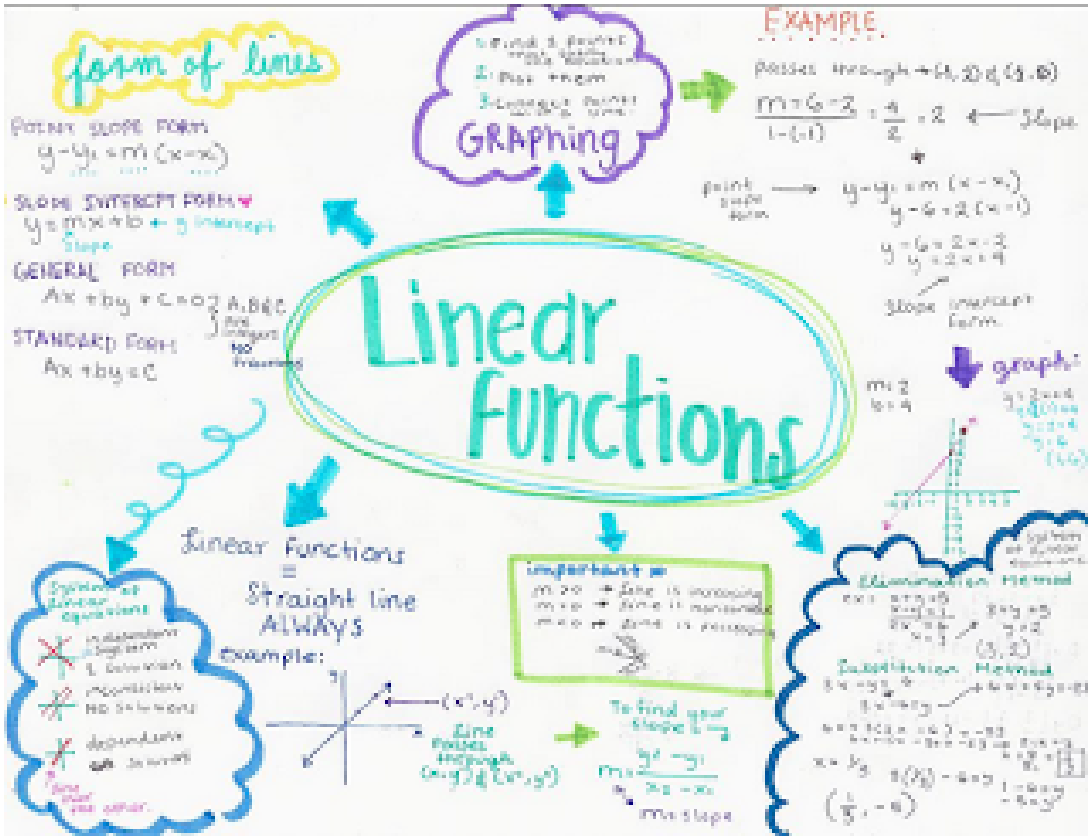
Step 4: Create your mind map

Functions

1. Polynomials
2. Rational
3. Exponential
4. Logarithmic
5. Trigonometric

If you have any questions contact Mr. Lester at jlester@episcopalcollegiate.org

Example of a mind map for Linear Functions


Linear Functions
form of lines
POINT SLOPE FORM
SLOPE INTERCEPT FORM
GENERAL FORM
STANDARD FORM
GRAPHING
EXAMPLE
graph:
Linear Functions = Straight line ALWAYS
example:
important
Elimination Method
Substitution Method