

AP CALCULUS AB "SUMMER ASSIGNMENT"

While there is no formal written summer assignment for AP Calculus AB, you are expected to **KNOW** many of the concepts you learned in Pre-Calculus.

1) **UNIT CIRCLE** - It will not just be filling in a unit circle! You will need to locate angles on the unit circle, find co-terminal angles and reference angles, and find trig values such as $\cot(41\pi/6)$. You should be able to do all of these things in degrees and radians and **WITHOUT** a calculator!!

2) **TRIG IDS** - You must also know the following sets of trig identities. Be sure that you can recognize ALL versions of ALL of the IDs.

- 1) Reciprocal (6)
- 2) Quotient (2)
- 3) Pythagorean (3)
- 4) Even/Odd (3)
- 5) Sum and Difference (3)
- 6) Double and Half (8)

3) **Parent graphs**: constant, linear, quadratic, cubic, square root, rational, absolute value, $\ln x$, e^x , a^x , ALL six original trig functions (from -2π to 2π using any scale on the x and y axis)

4) **Log and Natural log** – You should know all properties and laws

5) **Area Formulas** - rectangle, square, triangle, equilateral triangle, trapezoid, circle

6) **Volume Formulas** – sphere, cone, cylinder, prism

You will have a quiz on ALL of these items during the first week of school so you need to review and practice over the summer!!! It will be a TIMED quiz. It will count as TWO quiz grades and may not be dropped at the end of the quarter.

Do yourself a favor and keep your Pre Cal notebook!!!!

Email me over the summer at ysurles@wcpss.net if you have questions.

I am looking forward to fun-filled semester of Calculus with all of you in the fall ☺

Mrs. Surles