Calculus Summer Work

As we move into the next school year, we prepare for new challenges and experiences. However, it is important that our foundation is sound and on sure footing. Throughout the summer, you will complete a series of modules in onCampus for Honors/AB Calculus. The purpose of this work is to keep you current in your math skills and to make sure you are prepared to complete standard tasks that will come up in a Calculus I class. After discussion with students and personal reflection, I have created what I believe will be an appropriate level of work to complete throughout the summer.

The work will be organized into two week chunks, in order to account for vacations, down time, jobs, personal responsibilities, and such. It is not my intention for you to struggle through this work, but if you have questions I will be available via email or the Remind app. You are encouraged to use online resources to review topics independently before asking for help. The schedule is as follows:

Assignment 1 – Due July 15, 2018

<u>Function notation</u>: This will include **graphs** and **equations** where you will have to identify values of functions, operations, and compositions.

Assignment 2 – Due July 29, 2018

<u>Trigonometry</u>: This will mostly be using the **unit circle** to find exact values of trigonometric functions as well as a bit of triangle work.

Assignment 3 – Due August 12, 2018

<u>Lines and Polynomials</u>: This section will include finding the **slope** between two points, giving the **equation of a line** when given two points, and graphing lines. It will also include **factoring** and finding **x and y intercepts** of polynomials. Please use your calculators.

Assignment 4 – Due August 26, 2018

<u>Rational Expressions</u>: This will pay particular attention to discontinuities (**vertical asymptotes** and **holes in the graph**) as well as end behavior (**horizontal asymptotes**).

Assignments will be listed in the assignments tab of a class labeled "Mathematics Summer Nurturing Skills Course" in onCampus. We will maintain a Sunday night schedule throughout the summer. Assignments will close at midnight on their due dates as they do throughout the year; I will not be reopening assignments after their due dates. These assignments will be put into a single online assignment grade for first quarter next year.

If you have any further questions or concerns, do not hesitate to contact me.

Ms. T

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