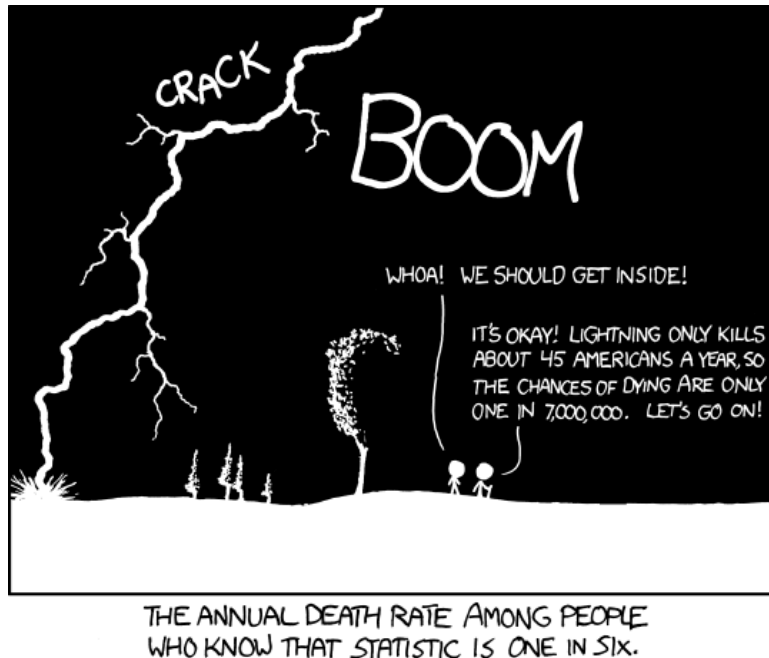


Pre-Calculus

(1/8-1/26)



**"Pure mathematics is, in its way, the poetry of logical ideas."
-Albert Einstein**

Overview:

I hope you had a wonderful winter break! For this first week, you will be either practicing for upcoming standardized tests or helping classmates who are struggling with familiar concepts. We will begin the first of a set of Desmos activities which will give additional practice in identifying and modeling scenarios. The remainder of this unit is devoted to probabilities and exploring their implications in the real world, as well as an introduction to trigonometry.

Changes in Homework Policy:

1. The problem set portion of the individual work will be due each Monday. They must be submitted on loose paper, with all relevant work for the sections stapled together.
2. Vocabulary will be due the day of assessments (roughly every other Friday).

Lessons:

- ___ 8.6: Counting Principles
- ___ 8.7: Probability
- ___ 4.1: Radian and Degree Measures
- ___ 4.2: Trigonometric Functions: The Unit Circle

Guiding question 7:

How can we calculate the probability of events which directly affect each other? What about events which are independent?

- ___ 1) **Review Week:** Welcome back! We will be taking this first week to practice test-taking skills.
- ___ a. In a group of 3 (max), work through the provided practice SAT test.
 - ___ b. **Desmos Activity: Charge!** Model the charge time of an iphone with a linear function.

Code: **DME7F**

Both due by Friday, 1/12

- ___ 2) **Vocabulary: Fundamental Counting Principle, Permutation, Distinguishable Permutation, Combination, Sample Space, Event, Probability, Mutually Exclusive Event, Independent Event, Trigonometry, Radian, Complementary/Supplementary Angle** (do one of the below).

- a. Complete a vocabulary organizer (ask me for one).
- a. Create a mind-map with connections, a story, or a drawing with captions that shows the connections between the above terms.
- b. Create vocabulary cards of the above terms. Be sure to include an example for each!

DUE: Fri, 1/26

- ___ 3) **Problem Sets:** You will find the problems in the textbooks located in the classroom **OR** in the pdf form on Google Classroom. You must complete the whole set for full credit!

- ___ a. 8.6: Counting Principles (p.634 #'s 9-19 odds, 23, 25, 27, 33, 35, 37)
- ___ b. 8.7: Probability (p.645 #'s 1-31 odds)

DUE: Mon, 1/22

- ___ c. 4.1: Radian and Degree Measure (p.265 #'s 1-13 odds, 27, 29, 35, 37, 39, 41, 43, 45, 71)
- ___ d. 4.2: Trig Functions: Unit Circle (p.274 #'s 1-19 odds, 45, 47, 51, 53, 55, 61, 73)

DUE: Mon, 1/29

- ___ 4) **Graphic Organizer - Unit Circle:** Complete a color-coded Unit Circle. **(DUE: Fri, 1/26)**

- ___ 5) **ASSESSMENT: Probability, Intro to Trig** (Friday, January 26th)