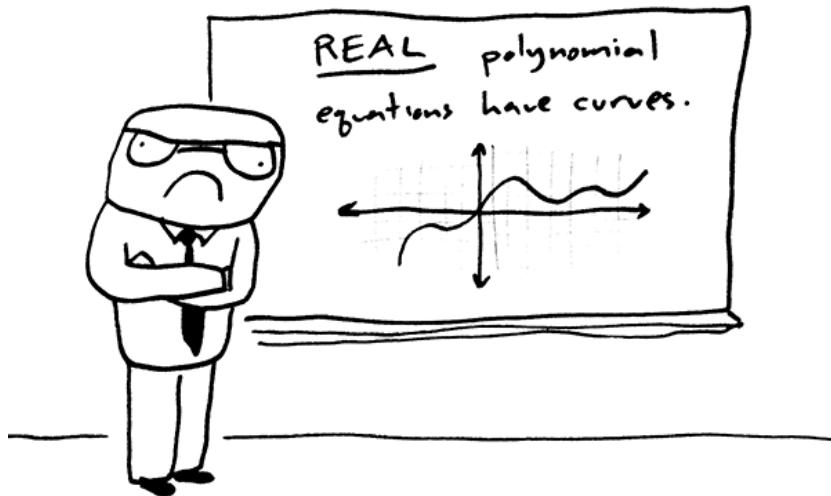


# Algebra 2

(1/8-1/26)



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

**-Albert Einstein**

## Overview:

I hope you had a wonderful winter break! Between now and January 26<sup>th</sup>, we will first practice some SAT questions to refamiliarize ourselves with math. We will then shift our attention to modeling linear equations as a class. Finally, we will generalize the rules and tricks of quadratic equations and parabolas to include all polynomials.

## 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:**

- 5.1:** Use Properties of Exponents
- 5.2:** Evaluate and Graph Polynomial Functions
- 5.3:** Add, Subtract, and Multiply Polynomials
- Connecting Polynomials and their Functions

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**Guiding question 7:****What are polynomial functions and how can we use them to graph polynomials?**

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- 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:** Scientific Notation, Polynomial, Synthetic Substitution, End Behavior, Like Terms, Root, Leading Term (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. 5.1: Use Properties of Exponents (p.333 #'s 3-27 odds)
  - b. 5.2: Evaluate and Graph Polynomial Functions (p.341 #'s 3-19 odds, 29-35 odds)

**DUE: Mon, 1/22**

- c. 5.3: Add, Subtract, and Multiply Polynomials (p.349 #'s 3-21 odds, 29, 31, 49, 51)

**DUE: Mon, 1/29**

- 4) Desmos: Constructing a Polynomial:** Create graphs of polynomials by identifying key features of their equations. See google classroom for more details.

**DUE: Fri, 1/26**

- 5) ASSESSMENT: Polynomials (Friday, January 26<sup>th</sup>)**