

# Geometry

(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! Between now and January 26<sup>th</sup>, you will review and assist Algebra 1 in activities related to linear equations. We will then investigate polygons and begin formulating theorems to classify them.

## 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. Half credit will be granted if only answers are written; give them context!
2. Vocabulary/Theorems will be due the day of assessments (roughly every other Friday).

**Lessons:**

- \_\_\_ 6.1: Polygons
- \_\_\_ 6.2: Properties of Parallelograms
- \_\_\_ 6.3: Proving Quadrilaterals are Parallelograms
- \_\_\_ 6.4: Rhombuses, Rectangles, and Squares

**Guiding question 7:****How can we use linear equations to model and extrapolate data?**

\_\_\_ 1) **Review Week:** Welcome back! We will be taking this first week to regain math intuition that we may have lost during the break:

- \_\_\_ a. Desmos: Graphing Stories – Watch videos of different scenarios and draw functions which explain them. **CODE: 9URDU**
- or-**
- \_\_\_ b. Desmos: Marble Slides (Lines) – Transform lines to send the marbles through the stars. **CODE: 7V6XY**

See classroom for more details about desmos. **DUE: Fri, 1/12**

\_\_\_ 2) **Vocabulary: Polygon, Vertex, Diagonal (of a polygon), Equilateral, Equiangular, Parallelogram, Rhombus, Rectangle, Square,** (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) **Theorems:** Complete a theorem worksheet for the following theorems:

- 1) Interior Angles of a Quadrilateral (p.324)
- 2) Theorems about Parallelograms (all 4!) (p.330)
- 3) Theorems 6.6-6.10 (p.338-339)
- 4) Theorems 6.11-6.13 (p.348-349)

\_\_\_ 4) **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. 6.1: Polygons (p.325, #'s 13-29 odds, 41-45 odds) **DUE: Mon, 1/22**
- \_\_\_ b. 6.2: Properties of Parallelograms (p.334, 21-37 odds, 39)
- \_\_\_ c. 6.3: Proving Quadrilaterals are Parallelograms (p.342, #'s 9-25 odds) **DUE: Mon, 1/29**
- \_\_\_ d. 6.4: Rhombuses, Rectangles, and Squares (p.351 #'s 13-37 odds, 55, 57)

\_\_\_ 5) **ASSESSMENT: Quadrilaterals (Part 1)** (Friday, January 26<sup>th</sup>)