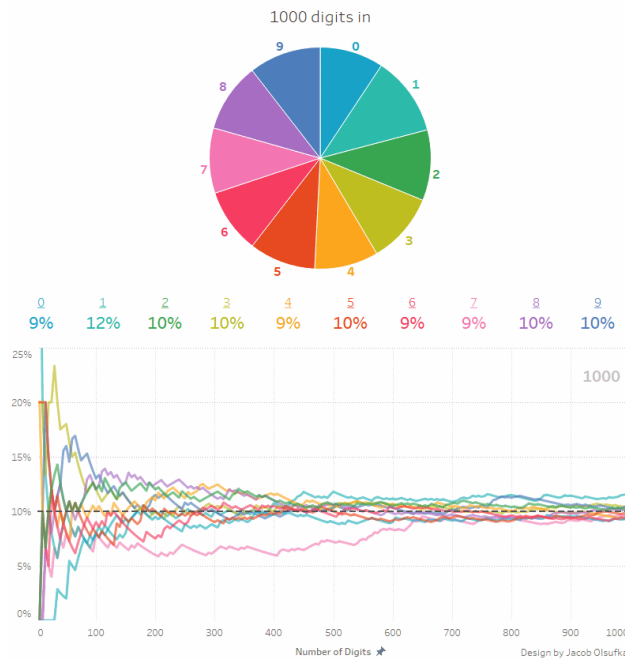


Statistics

(1/8-1/26)

VISUALIZING π



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

Overview:

Welcome back! This first week, you will either be practicing for upcoming standardized tests (or helping out). We will then continue to discuss R.M.S. error and explore ways to interpret it both through scatter plots and residual plots.

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:

- ___ **11.1:** Introduction to R.M.S. Error for Regression
- ___ **11.2:** Computing the R.M.S. Error
- ___ **11.3:** Plotting Residuals
- ___ **11.4:** Looking at Vertical Strips

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

- ___ **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. Present Regressions Final Project (**Wed, 1/10**)
 - ___ c. **Desmos Activity: Charge!** Model the charge time of an iphone with a linear function.

Code: **DME7F****DUE: Friday, 1/12**

- ___ **2) Vocabulary: R.M.S. Error for Regression, Residual, Residual Plot, Multiple Regression, Homoscedastic, Heteroscedastic** (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. 11.1: Introduction to R.M.S. Error for Regression (p.184 #'s 1-6)
- ___ b. 11.2: Computing the RMS Error (p.187 #'s 1-3)

DUE: Mon, 1/22

- ___ c. 11.3: Plotting Residuals (p.189 #'s 1-3)
- ___ d. 11.4: Looking at Vertical Strips (p.193 #'s 1-5)

DUE: Mon, 1/29

- ___ **4) Desmos Activity: Penny Circle:** Model how many pennies you can fit in a circle of any diameter with quadratic equations. (**Fri, 1/19**)

Code: **6K9XP**

- ___ **5) ASSESSMENT: R.M.S. Error, Residuals** (Friday, January 26th)