Lesson Plan, Lesson 2

- take attendance, hand students warm up, 10 minutes.
- review warm up, 5 minutes

Warm Up

Consider the following two way frequency table and then answer the following question.

	Has Android Phone	**Has iPhone**	**Other**	**Total**
11th grade	27	38	7	72
12th grade	23	30	6	59
Total	50	68	13	131

1. What percent of students in the 12th grade have iPhones?
2. What percent of students that have iPhones are in the 12th grade?
3. What percent of students surveyed are there that are in the 11th grade that don't use Android or iPhones?
4. What percent of 12th graders use either an Android phone or an iPhone?

Home Work Review

What did we find from the cities?

	Latitude (°N)	**Maximum Temperature Recorded (F°)**
Charleston	32	104
Chicago	42	105
Denver	40	105
Honolulu	21	95
Houston	30	109
Los Angelos	34	135

	Latitude (°N)	Maximum Temperature Recorded (F°)
Miami	26	100
Minneapolis	45	108
NYC	41	106
Saint Louis	39	115
San Diego	33	111
Seattle	48	108

Whoa! These results are surprising. The line of best fit is $y = 0.290215x + 97.9931$ and the correlation coefficient, r, is equal to 0.2363, meaning there is a weak **positive** association between degrees North latitude and maximum temperature ever recorded. What this indicates is that as you go farther North in the US, you might have a slightly higher temperature! Whoa!

When we looked at the data from Dec. 25, 2017 we had the following data.

	Latitude (°N)	Maximum Temperature Recorded (F°)
Charleston	32	64
Chicago	42	22
Denver	40	23
Honolulu	21	82
Houston	30	52
Los Angelos	34	64
Miami	26	83
Minneapolis	45	5
NYC	41	38
Saint Louis	39	29
San Diego	33	74
Seattle	48	35

When plotting this data in Desmos, our line of best fit was: $y = -2.80264x + 148.245$ and our correlation coefficient, r, was -0.8647, meaning a strong **negative** association between degrees North latitude and maximum temperature ever recorded. What this would indicate is that the farther North in the US you went on Dec. 25th, 2017, the colder it got, which is expected. So why the difference. Discuss. (and then I'll share my thoughts).

Have students work on best fit using Desmos

Work through practice 2, 3, and 4. Help Students as necessary, review after each one.

After Break

- Work on page 1, practice 6, review
- Work on 1 through 5, practice 7, review
- work on practice 8

Homework

Practice 9

To Print

- Warm up
- Practice 2
- Practice 3
- Practice 4
- Practice 6, page 1
- Practice 7, pages 1 & 2
- Practice 8
- Practice 9