Z-Scores Intro Notes

the z-score tells you how many SD's the data is from the mean

$$z = \frac{data - mean}{SD}$$

The z-score tells you how far your data point is from the mean. This will help with probabilities next week!
This equation only works for *normal distribution.*

* if z-score is positive, the data is above the mean
* if z-score is negative, it's below.

Ex. 1: Find the z-score given that the average of the test was 85, the standard deviation was 2 and your score was 87.

$$Z = \frac{87 - 85}{2} = \frac{2}{2} = 1$$

$\boxed{Z = 1}$ the z-score being 1 means the score was above the average by 1 SD.