



What could be a good title for the histogram below?



Homework

Quiz

Finding Outliers

Try the first set of data on "Day Four Warm Up" in your packet!

Launch!

A recent article says that teenagers send an average of 100 text messages per day. If I collected data from 6 teenagers, what could the possible data set look like to get this average?

Report your **answer** on the board

Now find the median, range, and IQR for your set of data

What do you notice?

"Is there a measure of spread that uses all of the data to represent variation?"

Standard Deviation!

is a widely used measurement of variability used in statistics.

It shows how much variation from the 'average' (mean)

A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values.





Go back to the cell phone data and find the standard deviation.

<u>Here are prices of ten cell phones (in dollars):</u> 20, 50, 99, 150, 75, 210, 99, 110, 115, 300

Answer: 81.14

Create normal curve that shows the distribution of the cell phones

What interval does the middle 68% lie in? 41.6 to 203.9 What interval does the top 2%? Above 285 Where does 96% of the data lie? Between -39.5 and 285 What cell phones lie in the top 50%? Above 122.8 What percentage lies between 122.8 and 285? Find the standard deviation of the backpack data and create 3 questions you could ask a classmate.