

Name: _____ Hour: _____ Date: _____

How many colleges are you applying to?



How many different colleges is your group of 4 applying to? Find the total number of colleges for your whole group.

1. Record the data for the class here.

2. Calculate the mean and median for the set of data. Compare them.

3. What is the range of the data?

Finding Standard Deviation

4. Finding range is helpful but it does not tell us how spread out the data is between the minimum and maximum. How can we find the **average distance of the values from the mean**?

- a. Complete the table.

- b. The average you calculated is the average of the **squared distances** from the mean. How do we use this to find the **average distance from the mean**? Find it.

Value	Distance from mean	(Distance from mean) ²
Total:		
Average (Distance from mean) ² :		

5. Go to stapplet.com. Enter the classroom data and find the summary statistics. Verify our work. How does it compare?

6. We forgot to add one group that applied to 40 colleges! Add this group to the data set. Calculate the new mean, median and standard deviation using the applet. How does it compare to the original measures? Why do you think this is?

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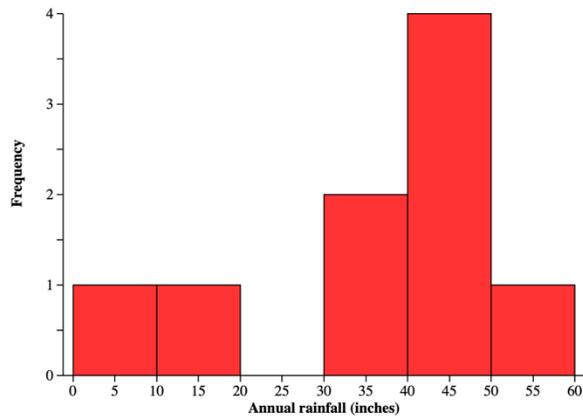
Describing Quantitative Data

Important Ideas:

Check Your Understanding:

A researcher is interested in how much annual rainfall is typical in the United States. She takes a random sample of 9 cities in the U.S. and records the annual rainfall, in inches.

8.2
10.3
33.5
39.1
40.5
41.9
42.4
44.9
53.7



1. Calculate the mean annual rainfall for these cities.
2. Find the median annual rainfall for these cities.
3. Would you use the mean or the median to summarize the typical annual rainfall for a U.S. city? Explain.
4. The standard deviation of the annual rainfall for these 9 cities is 15.52 inches. Interpret this value.