

Unit 11 – Statistics Distance Learning Recap (Lessons: 3/18 – 3/20)

Populations & Samples

1. A company with 10,000 employees would like to know whether their employees think that they are paid enough. Which of the following would give the answer that is most representative of *all* the employees?
 - A. Ask the question of 1 person from each of the company’s three departments.
 - B. Ask the question of 200 employees whose names have been chosen at random.
 - C. Ask the question of all 10,000 people and then choose five names at random.
 - D. Ask the question of 200 employees from the same department.

Unbiased & Biased Data Collection

2. A principal designed a survey to find out what food students would like in the school cafeteria. What would be an **unbiased** method of sampling that would help the principal make a valid decision about which foods to add to the lunch menu?
 - A. Surveying the students in the “I Love Sushi” club.
 - B. Surveying the boys on the basketball team.
 - C. Surveying 50 random students from each lunch period.
 - D. Surveying the students afterschool at Carvel.

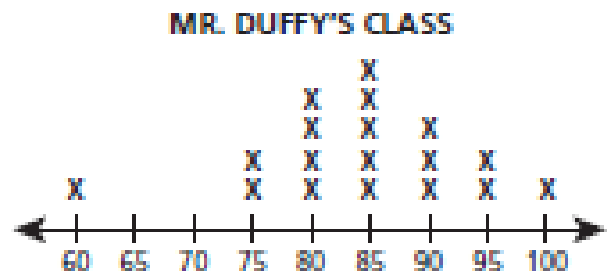
Measures of Center

3. While away at college, Cameron worked at a local restaurant to earn spending money. The following table shows the amount of money he earned in tips for the months he worked.

Month	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Apr.
Amount of Tips	\$180	\$228	\$232	\$59	\$188	\$234	\$192	\$228

- a) Calculate the **mean**, **median** and **mode** of the data set.
 - b) Which measure of center, the **mean** or **median** best represents the amount of tips Cameron earned?
4. The following line plot displays Mr. Duffy’s second period math test results.

- a) What test score did most of the students receive?
- b) What is the mean test score? Do you think this value summarizes how the class did as a whole?



Box and Whisker Plots

5. What is the lowest price of a pair of jeans?

6. What is the highest price of a pair of jeans?

7. What is the median price of a pair of jeans?

8. Which price of jeans represents the lower quartile?

9. Which price of jeans represents the upper quartile?

10. What percent of the jeans are priced between \$46 and \$48?

11. What is the range in price of jeans?

12. A box-and-whisker plot only contains certain aspects of a data set. Which of the following cannot be determined by looking *only* at the box-and-whisker plot?

- A. Mean B. Median C. Range D. The lowest data value in the set

13. Use the data to construct a box and whisker plot.

30 44 25 40 32 52 50 26 55 26

Prices of Jeans

