Describe a distribution by analyzing its shape, center, spread, and unusual features, Practice Set B

Name:

Date:

1. Sketch a distribution (use either a histogram or dotplot) that satisfies the following situations:

a. Approximately symmetric, unimodal

b. Skewed left, unimodal

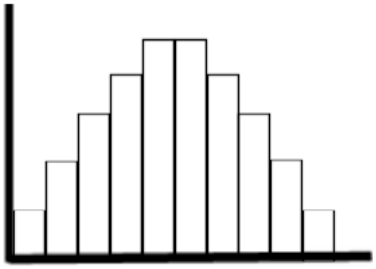
c. Uniform, approximately symmetric

d. A distribution for which the mean would be a good measure of center and standard deviation a good measure of spread

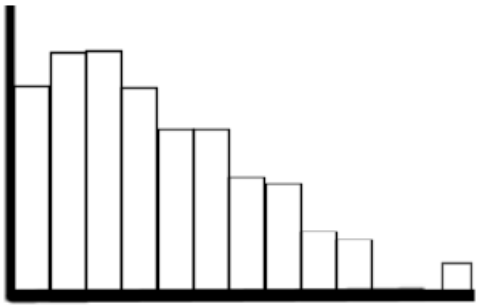
e. A distribution for which the median would be a good measure of center and IQR a good measure of spread

2. Describe the following two distributions in paragraph form.

a.



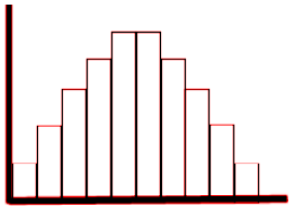
b.



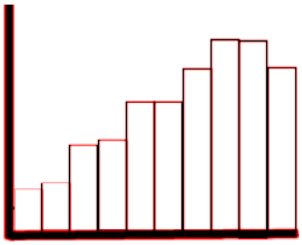
Describe a distribution by analyzing its shape, center, spread, and unusual features, Practice Set B Answer Key

1. Sketch a distribution (use either a histogram or dotplot) that satisfies the following situations: *Answers may vary. As long as distributions have the appropriate characteristics, they should be counted as correct.*

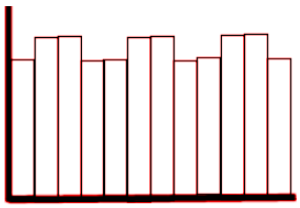
a. Approximately symmetric, unimodal



b. Skewed left, unimodal



c. Uniform, approximately symmetric



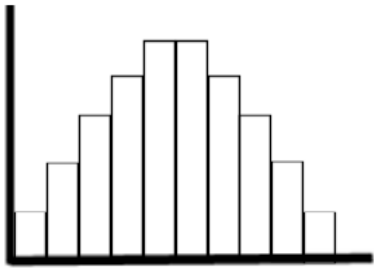
d. A distribution for which the mean would be a good measure of center and standard deviation a good measure of spread *Correct answers here are distributions that are approximately symmetric and unimodal or uniform. While students may offer bimodal or multimodal distributions, the mean may be misleading here as it could fall between modes.*

e. A distribution for which the median would be a good measure of center and IQR a good measure of spread *Correct answers here are distributions that are skewed or have*

outliers.

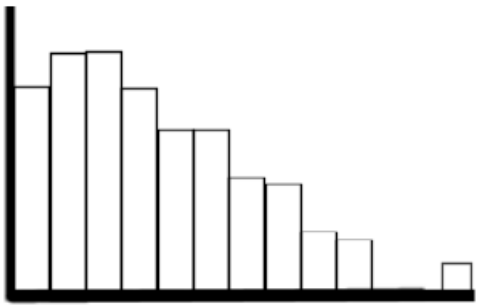
2. Use the mnemonic you learned to describe the following two distributions in paragraph form. *Paragraphs may vary but should be similar in content.*

a.



The distribution of data is approximately symmetric and unimodal. It has no gaps or obvious outliers. The mean would serve as a good measure of center for this distribution. The standard deviation would serve as a good measure of spread for the distribution.

b.



The distribution of data is unimodal and skewed right. It has a possible high outlier. The median would serve as a good measure of center for the distribution. IQR would serve as a good measure of spread for the distribution.