

## Assignment: Create Histograms

Create a histogram for three (3) of the following four data sets.

1. A successful local car dealership sells both new and used cars. The data set below lists the sales price of used cars sold at the dealership during the past month.

{6,250, 8,500, 12,300, 14,275, 8,750, 7,500, 7,900, 10,400, 12,450, 9,725, 10,500, 12,650}

- a. Decide how many bars you will include in the histogram. List the range of the bar values and the corresponding frequency in the table. Remember that each bar should contain the same number of values. (Note: You may leave some rows blank or add more rows depending on the number of bars your histogram will contain.)

Range of Bar Values	Frequency

- b. Draw a histogram to represent the data set. Be sure to include a title, labels indicating the bar values along the x-axis, labels for the bar height values (frequency) along the y-axis, and bars drawn to the appropriate heights

2. Dr. Freeman is a dentist in the local community. The data set below lists the ages of his current patients who are covered under a certain insurance plan.

{32, 24, 40, 15, 7, 43, 26, 31, 9, 18, 36, 48, 36, 13, 34, 53, 5, 34, 42, 25}

- a. Decide how many bars you will include in the histogram. List the range of the bar values and the corresponding frequency in the table. Remember that each bar should contain the same number of values. (Note: You may leave some rows blank or add more rows depending on the number of bars your histogram will contain.)

Range of Bar Values	Frequency

- b. Draw a histogram to represent the data set. Be sure to include a title, labels indicating the bar values along the x-axis, labels for the bar height values (frequency) along the y-axis, and bars drawn to the appropriate heights

3. A temporary employment agency keeps track of the hourly wages of the employees that it places in various jobs. The data set below shows the hourly wages of the employees who started new jobs over the course of a month.

{10.00, 9.50, 12.50, 10.00, 10.75, 9.25, 15.00, 14.25, 10.25, 13.50, 16.75, 9.75, 15.50, 15.75}

- a. Decide how many bars you will include in the histogram. List the range of the bar values and the corresponding frequency in the table. Remember that each bar should contain the same number of values. (Note: You may leave some rows blank or add more rows depending on the number of bars your histogram will contain.)

Range of Bar Values	Frequency

- b. Draw a histogram to represent the data set. Be sure to include a title, labels indicating the bar values along the x-axis, labels for the bar height values (frequency) along the y-axis, and bars drawn to the appropriate heights

4. A software security company offers a free anti-virus program on its website. The data set below represents the number of minutes it took for customers to download the program to their computers on a certain day.

{2.5, 1.8, 1.9, 2.3, 2.1, 1.9, 2.1, 3.4, 2.2, 3.5, 1.7, 3.7, 1.4, 2.5, 1.8, 3.2, 4.1, 3.4}

- a. Decide how many bars you will include in the histogram. List the range of the bar values and the corresponding frequency in the table. Remember that each bar should contain the same number of values. (Note: You may leave some rows blank or add more rows depending on the number of bars your histogram will contain.)

Range of Bar Values	Frequency

- b. Draw a histogram to represent the data set. Be sure to include a title, labels indicating the bar values along the x-axis, labels for the bar height values (frequency) along the y-axis, and bars drawn to the appropriate heights

## Part II: Find Data to Create a Histogram

Next, search the internet to find a real-world data set that can be graphed as a histogram. The following Web sites are good places to look for data if you're not sure where to start.

<http://2010.census.gov/2010census/>  
<http://www.nationalparkstraveler.com/2012/03/ranking-national-parks-visitation-20119573>

- a. After you find the data, choose at least 20 data values to include in your data set. List the data below and provide the name of the source (Web site URL) where you found the data.

{  
}

Data source: \_\_\_\_\_

- b. Decide how many bars you will include in the histogram. List the range of the bar values and the corresponding frequency in the table. Remember that each bar should contain the same number of values. (Note: You may leave some rows blank or add more rows depending on the number of bars your histogram will contain.)

Range of Bar Values	Frequency

- c. Draw a histogram to represent the data set. Be sure to include a title, labels indicating the bar values along the x-axis, labels for the bar height values (frequency) along the y-axis, and bars drawn to the appropriate heights.

- d. Write two (2) questions that can be answered by analyzing your histogram. Provide answers to both questions.