

Assignment - Chapter 3

Complete the following problems related to Chapter 3. Upload to Canvas a single pdf containing your work before the deadline.

1. A local farmers' market conducted a survey to determine the most popular types of produce among its customers. The results of the survey are summarized in the table below. Using this data, create a bar chart and a pie chart to visualize the distribution of favorite produce types.

Favorite Produce at Farmers' Market

Produce	Number of Votes
Tomatoes	85
Cucumbers	70
Carrots	55
Lettuce	40
Spinach	20

2. A local school cafeteria tracked the sales of different types of meals over two semesters. The results of the sales data are summarized in the table below. Using this data, create a side-by-side bar chart and a stacked bar chart to visualize the sales of each type of meal over the two semesters.

Meal Sales Over Two Semesters

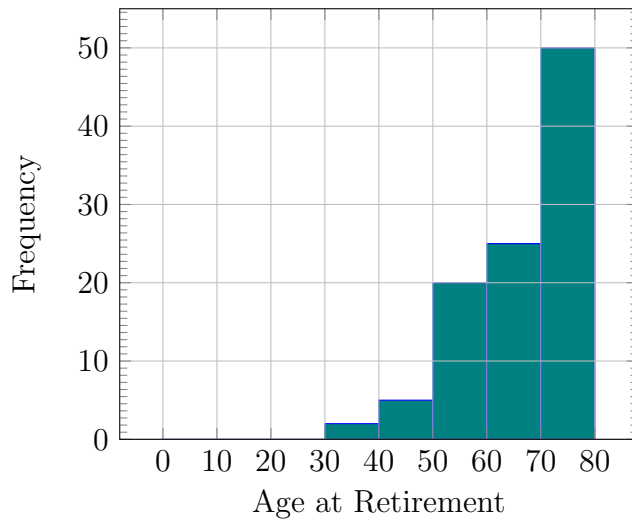
Meal Type	Fall Semester Sales	Spring Semester Sales
Vegetarian	180	220
Non-Vegetarian	240	260
Vegan	150	180

3. A community center conducted a survey to determine the age distribution of participants in a recent event. The ages of the participants are summarized in the dataset below. Using this data, create a histogram to visualize the age distribution of the participants. Use an appropriate bin width.

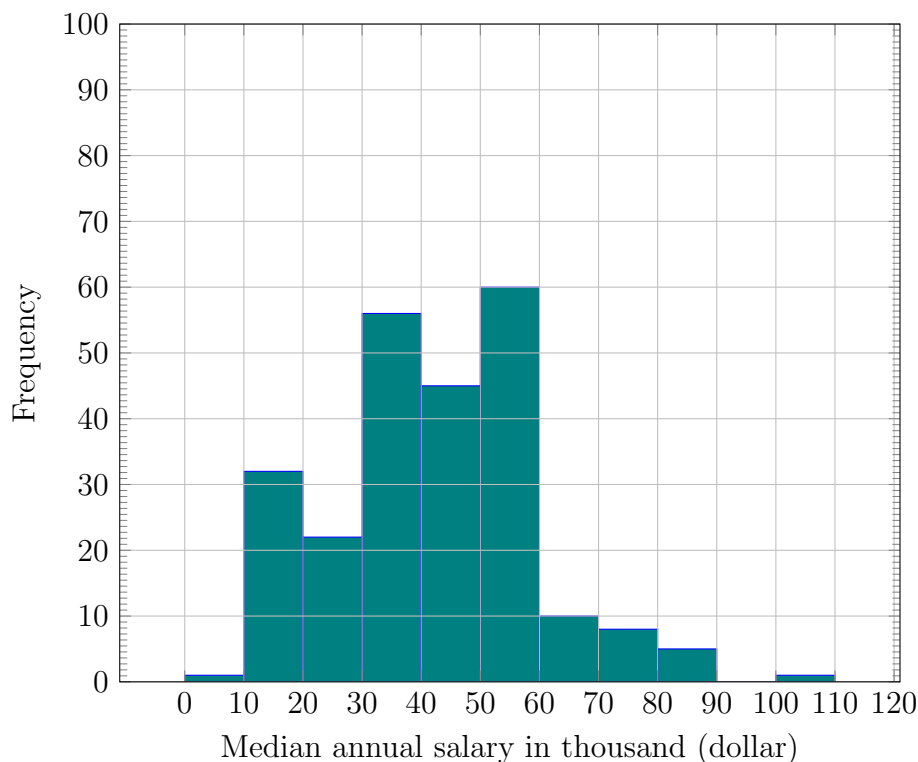
Dataset: Ages of Event Participants

18, 20, 20, 20, 22, 22, 23, 24, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 40, 42, 45, 45, 50.

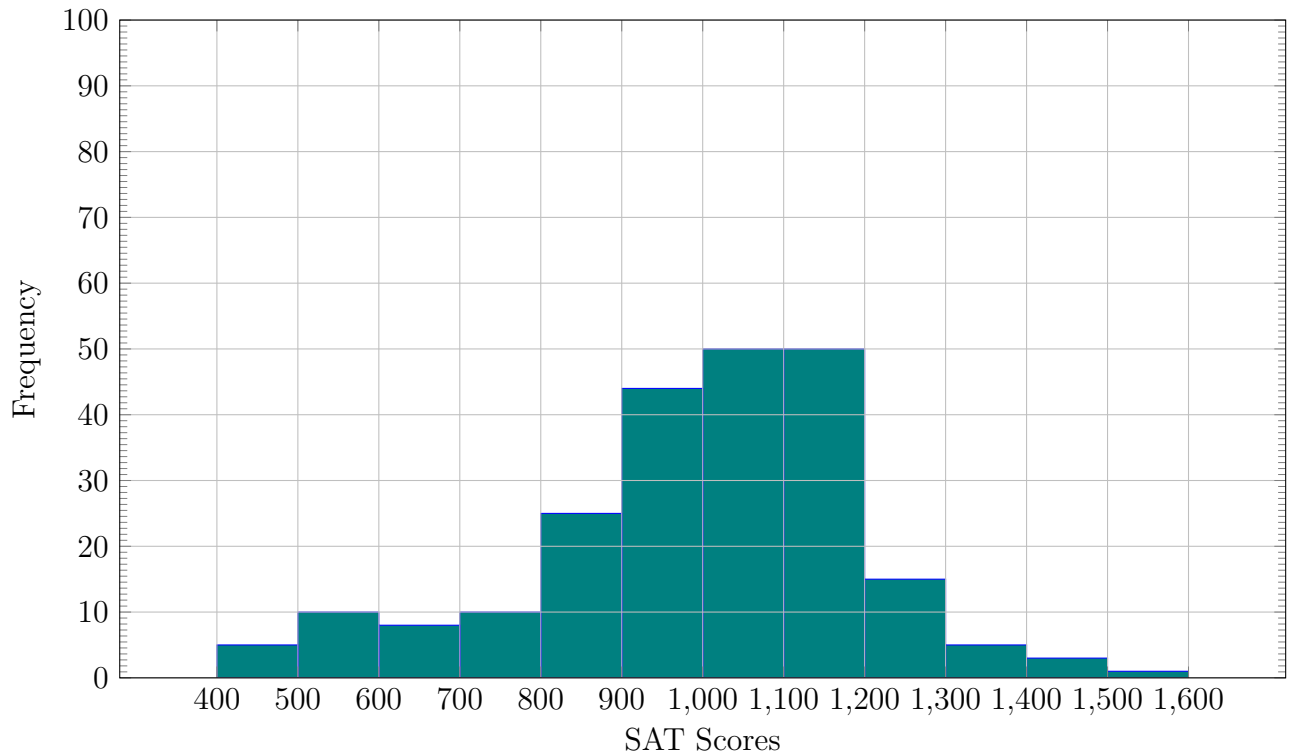
4. A nationwide study was conducted to analyze the retirement ages of individuals across various sectors, including healthcare, education, finance, technology, and manufacturing. Data was collected from participants who retired last year, representing a diverse range of industries and geographic locations across the United States. The ages of these participants are summarized in the histogram below. Using this histogram, answer the following questions.



- (a) Describe the shape of the histogram.
- (b) What is the typical age of retirement of the participants?
- (c) Are there any outliers in the dataset above?
5. A survey was conducted to analyze the annual salaries of individuals across a poor neighborhood in new Jersey. The sample chosen was representative of the population. The median annual salaries of these participants are summarized in the histogram below. Using this histogram, answer the following questions.



- (a) Describe the shape of the histogram.
 - (b) What is the typical median annual salary of the participants?
 - (c) Are there any outliers in the dataset above?
6. A survey was conducted to analyze the SAT scores of high school students across various schools in Texas. The SAT scores of these participants are summarized in the histogram below. Using this histogram, answer the following questions.



- (a) Describe the shape of the histogram.
- (b) What is the typical SAT score of the participants?
- (c) Are there any outliers in the dataset above?