### Solution

Consumers aged 35 to 54 years old spent approximately $21,000 on food and $45,000 on housing in 2018.

# 6.R.3 Exercises

## Concept Check

**True/False.** Determine whether each statement is true or false. If a statement is false, explain how it can be changed so the statement will be true. (**Note:** There may be more than one acceptable change.)

**1.** Graphs should always be clearly labeled, easy to read, and have appropriate titles.

**2.** Circle graphs show trends over a period of time.

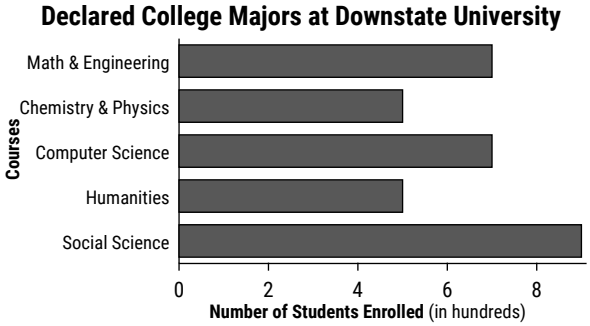
**3.** The frequency is the number of data items in a class.

**4.** Numbers that are halfway between the upper limit of one class and the lower limit of the next class are the class boundaries.

## Applications

Answer the questions using the given graphs.

**5.** The following bar graph shows the number of students in five fields of study at a university.



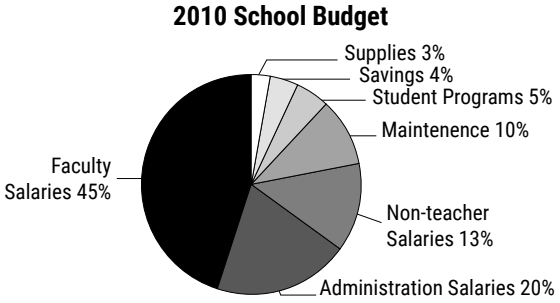

**a.** Which field(s) of study has the largest number of declared majors?

**b.** Which field(s) of study has the smallest number of declared majors?

**c.** How many declared majors are indicated in the entire graph?

**d.** What percent are computer science majors? Round your answer to the nearest tenth of a percent.

**6.** The following circle graph represents the various areas of spending for a school with a total budget of $34,500,000.



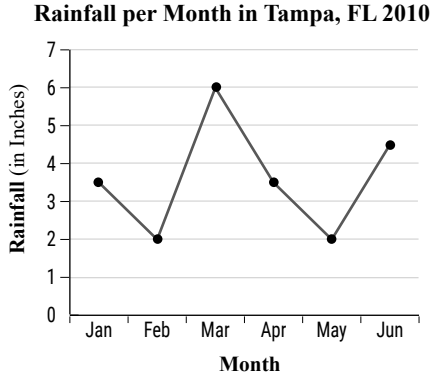

**a.** What amount will be allocated to each category?

**b.** What percent will be for expenditures other than salaries?

**c.** How much will be spent on maintenance and supplies

**d.** How much more will be spent on teachers' salaries than on ministration salaries?

**7.** The following line graph shows the total monthly rainfall in Tampa, Florida for the first 5 months of 2010.[1]




**a.** Which months had the least rainfall?

1 Source: weather.gov

**b.** What was the most rainfall in a month?

**c.** What month had the most rainfall?

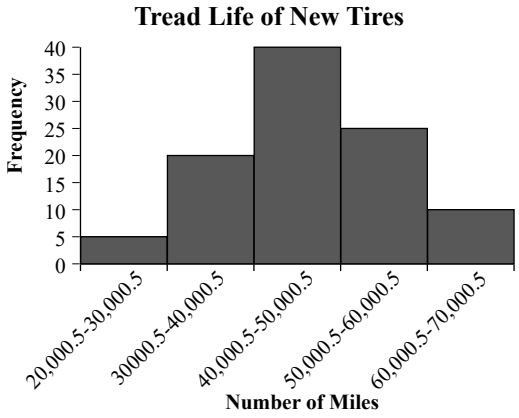
**d.** What was the mean rainfall over the six-month period (to the nearest hundredth)?

**8.** The following histogram summarizes the tread life for 100 types of new tires.

**a.** How many classes are represented?

**b.** What is the width of each class?

**c.** Which class has the highest frequency?




## Writing & Thinking

**9.** State three properties or characteristics that should be true of all graphs so that they can communicate numerical data quickly and easily.

**10.** Compare and contrast a bar graph and a histogram.