

1. Find the mean, median, and mode of each set of values.
 a. Customers per day: 98 87 79 82 101 99 97 97 102 91 93

b.

Weight (g)	2.3	2.4	2.5	2.6	2.8	2.9
Frequency	1	4	1	1	1	2

c.

Length (m)	12	13	14	15	16	17	18
Frequency	2	5	3	7	4	9	1

2. Identify the outlier of each set of values.

a. 32 35 3 36 37 35 38 40 42 34

b. 153 156 176 156 165 110 159 169 172

3. The list gives the average temperatures in January for several cities in the mid-South. Make a box-and-whisker plot of the data.

49.1 50.8 42.9 44.0 44.2 51.4 45.7 39.9 50.8 46.7 52.4 50.4

4. Make a box-and-whisker plot for the data below.

2 8 3 7 3 6 4 9 10 15 21 29 32 30 5 7 32 4 11 13 11 14 10 12 13 15

5. Identify the outlier in each data set. Then find the mean, median, and mode of the data set when the outlier is included and when it is not. Then make a box-and-whisker plot for the data.

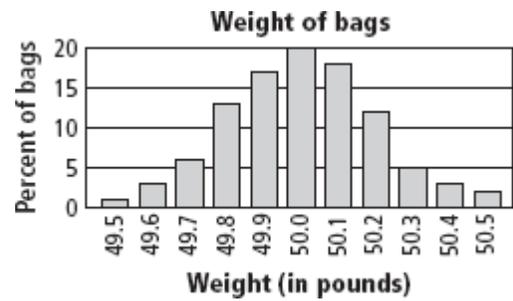
a. 23 76 79 76 77 74 75

b. 43 46 49 50 52 54 78 47

6. The table shows the number of shaved-ice servings sold during the first week of July. Find any outliers. Make a modified box-and-whisker plot.

Date	7/1	7/2	7/3	7/4	7/5	7/6	7/7
Number Sold	65	70	67	98	72	67	64

The actual weights of bags of pet food are normally distributed about the mean. Use the graph at the right for Exercises 1–4.



- a. About what percent of bags of pet food weigh 49.9 lb–50.1 lb?
 - b. About what percent of bags weigh less than 49.8 lb?
 - c. In a group of 250 bags, how many would you expect to weigh more than 50.4 lb?
7. A set of data has a normal distribution with a mean of 5 and a standard deviation of 0.8. Find the percent of data within each interval.
 - a. less than 5.3
 - b. less than 3.6
 - c. from 4.2 to 5.1
 - d. from 6.0 to 6.9
 - e. greater than 6.9
 - f. greater than 5.6
 8. The number of miles on a car when a certain part fails is normally distributed, with a mean of 60,000 and a standard deviation of 6000. What is the probability that the part will fail between 55,000 and 65,000 miles?
 9. A college only accepts students who score in the top 16% on the entrance exam. The exam scores are normally distributed, with a mean of 25 and a standard deviation of 3.8. To the nearest whole number, what is the least score you could earn and still be accepted to the college?
 10. A normal distribution has a mean of 50 and a standard deviation of 4. Find the probability that a value selected at random is in the given interval.
 - a. from 44 to 50
 - b. from 38 to 56
 - c. from 50 to 62
 - d. at least 50
 - e. at most 56
 - f. at least 38