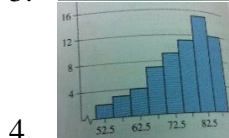
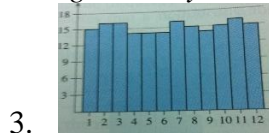


True or False? In Exercises 1, determine whether the statement is true or false. If it is false, rewrite it as a true statement.

1. When the mean is greater than the median, the distribution is skewed left.
2. Construct a data set in which the median and the mode are the same.

Graphical Analysis In Exercises 3 and 4, determine whether the approximate shape of the distribution in the histogram is symmetric, uniform, skewed left, skewed right, or none of these. Justify your answer.

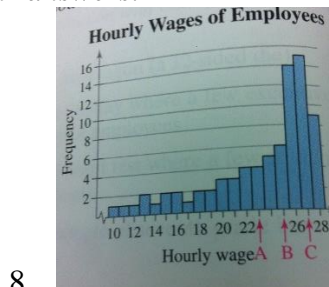


Finding and Discussing the Mean, Median, and Mode In Exercises 5-7, find the mean, median, and mode of the data, if possible. If any of these measures cannot be found or measure does not represent the center of the data, explain why.

5. **Education** The education cost per student (in thousands of dollars) from a sample of 10 liberal arts colleges.
30 35 19 22 22 20 23 21 35 25
6. **Air Quality** The responses of a sample of 1040 people who were asked if the air quality in their community is better or worse than 10 years ago
Better: 346 Worse: 450 Same: 244
7. **Weight (in pounds) of Dogs at a Kennel**

1	0 2
2	1 4 7
3	7 8
4	1 5 5
5	0 7
6	5
7	
8	
9	
10	6

Graphical Analysis In Exercise 8, the letters A, B, and C are marked in the horizontal axis. Describe the shape of the data. Then determine which is the mean, which is the median, and which is the mode. Justify your answers.



Finding the Weighted Mean In exercise 9 and 10, find the weighted mean of the data.

9. **Final Grade** The scores and their percents of the final grade for a statistics student are given. What is the student's mean score?

	Score	Percent of final grade
Homework	85	5%
Quizzes	80	35%
Project	100	20%
Speech	90	15%
Final Exam	93	25%

10. **Grades** A student receives the following grades, with an A worth 4 points, a B worth 3 points, a C worth 2 points, and a d worth 1 point. What is the student's mean grade point score?

B in 2 three-credit classes	D in 1 two-credit class
A in 1 four-credit class	C in 1 three-credit class

11. **U.S. Exports** The following data are the U.S. exports (in billions of dollars) to 19 countries for a recent year.

Canada	230.3
Mexico	134.2
Germany	41.3
Taiwan	23.0
Netherlands	31.1
China	55.2
Australia	17.8
Malaysia	12.6
Switzerland	14.4
Saudi Arabia	7.8
Japan	59.6
United Kingdom	45.4
South Korea	32.5
Singapore	24.7
France	24.2
Brazil	19.2
Belgium	21.3
Italy	12.6
Thailand	8.2

- A) Find the mean and median.
B) Find the mean and median without U.S. exports to Canada.
C) Which measure of central tendency, the mean or median, was affected more by the elimination of the Canadian export data?