

11. The heights (in feet) and the numbers of stories of nine buildings in Houston are listed. Use a scatter plot to display the data. Describe any patterns. (Source: Emporis Corporation)

Height (in feet)	992	780	762	756	741	732	714	662	579
Number of stories	71	56	53	55	47	53	50	49	40

12. The U.S. unemployment rates over a 12-year period are listed. Use a time series chart to display the data. Describe any patterns. (Source: U.S. Bureau of Labor Statistics)

Year	2001	2002	2003	2004	2005	2006
Unemployment rate	4.7%	5.8%	6.0%	5.5%	5.1%	4.6%

Year	2007	2008	2009	2010	2011	2012
Unemployment rate	4.6%	5.8%	9.3%	9.6%	8.9%	8.1%

SECTION 2.3

In Exercises 13 and 14, find the mean, the median, and the mode of the data, if possible. If any measure cannot be found or does not represent the center of the data, explain why.

13. The vertical jumps (in inches) of a sample of 10 college basketball players at the 2012 NBA Draft Combine (Source: DraftExpress)

24.5 29.5 32.5 28.0 28.5 25.5 34.0 24.5 30.0 31.0

14. The responses of 1009 adults who were asked whether they would vote for or against a law that would allow undocumented immigrants living in the United States the chance to become legal residents or citizens if they meet certain requirements (Adapted from Gallup)

Vote for: 734 Vote against: 255 No opinion: 20

15. Six test scores are shown below. The first 5 test scores are 15% of the final grade, and the last test score is 25% of the final grade. Find the weighted mean of the test scores.

78 72 86 91 87 80

16. Four test scores are shown below. The first 3 test scores are 20% of the final grade, and the last test score is 40% of the final grade. Find the weighted mean of the test scores.

96 85 91 86

17. Estimate the mean of the frequency distribution you made in Exercise 1.

18. The frequency distribution shows the numbers of magazine subscriptions per household for a sample of 60 households. Find the mean number of subscriptions per household.

Number of magazines	0	1	2	3	4	5	6
Frequency	13	9	19	8	5	2	4

19. Describe the shape of the distribution for the histogram you made in Exercise 3 as symmetric, uniform, skewed left, skewed right, or none of these.

20. Describe the shape of the distribution for the histogram you made in Exercise 4 as symmetric, uniform, skewed left, skewed right, or none of these.