(Y) 2.1 - 2.3 Review

Ch. 2 Descriptive Statistics

2.1 Frequency Distributions and Their Graphs

Solve the problem.

1) Identify the class width used in the frequency distribution.

Height (in inches)	Frequency
50 – 52	5
53 – 55	8
56 – 58	12
59 – 61	13
62 – 64	11

A) 3 B) 2 C) 5 D) 51

2) Identify the midpoint of the first class.

Height (in inches)	Frequency
50 – 52	5
53 – 55	8
56 – 58	12
59 – 61	13
62 – 64	11

A) 51 B) 49.5 C) 50 D) 52

3) Identify the class boundaries of the first class.

Height (in inches)	Frequency
50 – 52	5
53 – 55	8
56 – 58	12
59 – 61	13
62 – 64	11

A) 49.5 – 52.5 B) 50 – 52 C) 49 – 53 D) 50 – 64

4) Identify the class width used in the frequency distribution.

Phone Calls (per day)	Frequency
8 – 11	18
12 – 15	23
16 – 19	38
20 – 23	47
24 – 27	32

A) 4 B) 8 C) 3 D) 11

5. For the data below, construct a frequency histogram, [illegible] and a frequency polygon.

Height (in inches)	Frequency
50 – 52	5
53 – 55	8
56 – 58	12
59 – 61	13
62 – 64	11

6. t the data below, construct a [illegible], a relative frequency histogram [illegible]

eight (in pounds)	Frequency
135 – 139	6
140 – 144	4
145 – 149	11
150 – 154	15
155 – 159	8

7. For the data below, construct a cumulative frequency distribution a polygon.

Phone Calls (per day)	Frequency
8 – 11	18
12 – 15	23
16 – 19	38
20 – 23	47
24 – 27	32

8. For the data below, construct a [illegible] an ogive.

Miles (per day)	Frequency
1 – 2	9
3 – 4	22
5 – 6	28
7 – 8	15
9 – 10	4

A city in the Pacific Northwest recorded its highest temperature at 96 degrees Fahrenheit and its lowest temperature at 28 degrees Fahrenheit for a particular year. Use this information to find the upper and lower limits of the first class if you wish to construct a frequency distribution with 10 classes.

A) 28–34 B) 28–33 C) 25–28 D) 28–35

10. A sample of candies have weights that vary from 2.35 grams to 4.75 grams. Use this information to find the upper and lower limits of the first class if you wish to construct a frequency distribution with 12 classes.

A) 2.35–2.54 B) 2.35–2.55 C) 2.35–2.65 D) 2.35–2.75

11. The number of home runs that Mark McGwire hit in the first 13 years of his major league baseball career are listed below. (Source: Major League Handbook)

3 49 32 33 39 22 42 9 9 39 52 58 70

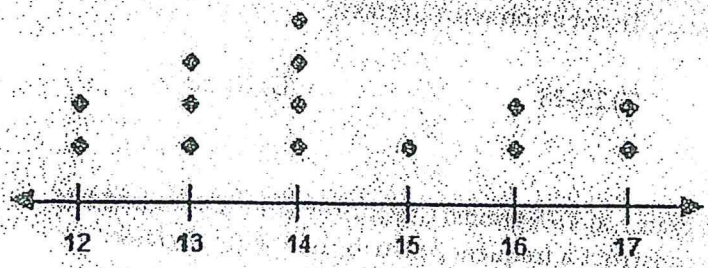
Make a stem-and-leaf plot for this data.

12. The numbers of runs batted in by Mark McLemore in the first 13 years of his major league baseball career are listed below. (Source: Major League Handbook)

0 102 56 25 9 9 56 165 88 122 150 91 114

Make a stem-and-leaf plot for this data.

13. For the dot plot below, what is the maximum and what is the minimum entry?



A) max: 17; min: 12 B) max: 54; min: 15 C) max: 54; min: 12 D) max: 14; min: 12

14. A study was conducted to determine how people get jobs. Four hundred subjects were randomly selected and the results are listed below.

Give % and central angle for each category.

Job Sources of Survey Respondents	Frequency
Newspaper want ads	72
Online services	124
Exexcutive search firms	69
Mailings	32
Networking	102

15. The heights (in inches) of 30 adult males are listed below. Construct a Pareto chart for the data.

70	72	71	70	69	73	69	68	70	71
67	71	70	74	69	68	71	71	71	72
69	71	68	78	73	74	70	71	69	68

16. Use a scatter plot to display the data below. All measurements are in milligrams per cigarette.

Brand	Tar	Nicotine
Benson & Hedges	16	1.2
Lucky Strike	13	1.1
Marlboro	16	1.2
Viceroy	18	1.4
True	6	0.6