Study Guide - Descriptive Statistics (Section 1-2)

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the problem.

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

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

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

2) Identify the midpoint of the first class. 2) _____

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

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

3) Identify the class boundaries of the first class. 3) _____

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

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

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

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

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

5) Identify the midpoint of the first class. 5) _____

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

A) 22 B) 9.5 C) 8 D) 9

6) Identify the class boundaries of the first class. 6) _____

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

A) 7.5 – 11.5 B) 7.9 – 22.9 C) 7 – 12 D) 8 – 11

7) Identify the class width used in the frequency distribution. 7) _____

Weight (in pounds)	Frequency
135 – 139	6
140 – 144	4
145 – 149	11
150 – 154	15
155 – 160	8

A) 6 B) 4 C) 135 D) 5

8) Identify the midpoint of the first class. 8) _____

Weight (in pounds)	Frequency
135 – 139	6
140 – 144	4
145 – 149	11
150 – 154	15
155 – 160	8

A) 139 B) 137 C) 11 D) 135

9) Identify the class boundaries of the first class. 9) _____

Weight (in pounds)	Frequency
135 – 139	6
140 – 144	4
145 – 149	11
150 – 154	15
155 – 160	8

A) 135 – 139 B) 134.5 – 139.5 C) 135 – 159 D) 134.9 – 139.9

Chapter 2- Problems to look at

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Use the given frequency distribution to find the
(a) class width.
(b) class midpoints of the first class.
(c) class boundaries of the first class.

1) **Height (in inches)**

Class	Frequency, f
50 - 52	5
53 - 55	8
56 - 58	12
59 - 61	13
62 - 64	11

1) _____

A) (a) 2
(b) 51.5
(c) 49.5-52.5

B) (a) 3
(b) 51
(c) 50-52

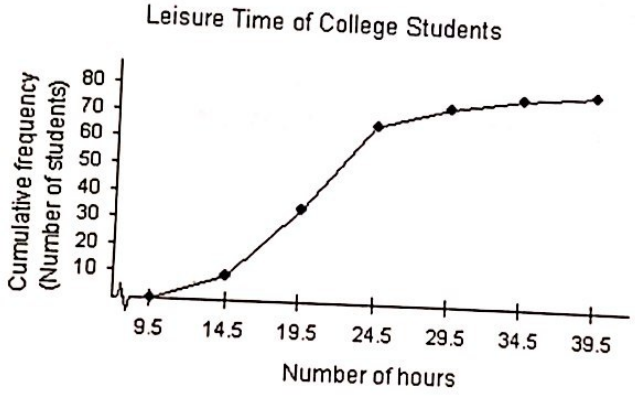
C) (a) 3
(b) 51
(c) 49.5-52.5

D) (a) 2
(b) 51.5
(c) 50-52

Provide an appropriate response.

2) Use the ogive below to approximate the number in the sample.

2) _____



A) 341

B) 80

C) 28

D) 100

10) _____

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

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

A) 9 B) 3 C) 2 D) 1

11) _____

11) Identify the midpoint of the first class.

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

A) 28 B) 5.5 C) 1.5 D) 5

12) _____

12) 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) 2.35–2.65 C) 2.35–2.55 D) 2.35–2.75

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Provide an appropriate response.

4) _____

4) For the stem-and-leaf plot below, what is the maximum and what is the minimum entry?

Key : 11| 7 = 11.7

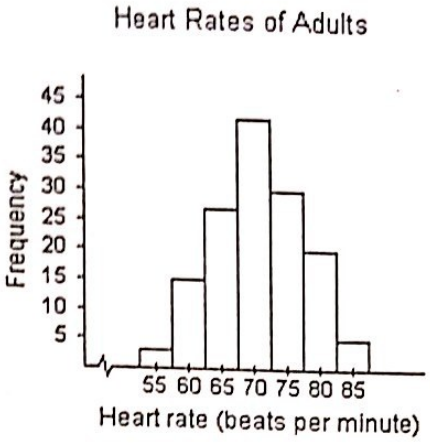
11	6 7
12	4 6 6 7 8 9
13	0 1 1 2 3 6 6 7 8 8
14	3 4 6 6 8 9 9 9
15	0 1 1 2 3 7 7 8 9
16	2 2 5 7 8 8 9 9
17	0 3

A) max: 173; min: 116 B) max: 17.0; min: 11.6

C) max: 17.3; min: 11.6 D) max: 17.3; min: 11.7

Provide an appropriate response.

9) Use the histogram below to approximate the mode heart rate of adults in the gym. 9) _____



A) 70 B) 2 C) 55 D) 42

Provide an appropriate response.

10) The lengths of phone calls from one household (in minutes) were 2, 4, 6, 7, and 8 minutes. Find the midrange for this data. 10) _____

A) 2 minutes B) 10 minutes C) 6 minutes D) 5 minutes

33) For the stem-and-leaf plot below, what is the maximum and what is the minimum entry? 33) _____

```
1|01
1|666789
2|0112344566
2|77788999
3|011234455
3|66678899
4|28
```

A) max: 48; min: 10 B) max: 42; min: 10 C) max: 39; min: 11 D) max: 9; min: 0