

Problem Set 12.3

1.

Stem	Leaf
1	9, 8
2	4, 7, 2, 9, 0, 6
3	2, 0, 0, 1, 4

2.

Stem	Leaf
2	9
3	4, 6
4	
5	5, 1, 6, 7
6	2, 7, 9, 2, 3, 1
7	4, 3, 8, 6
8	2, 4, 8
9	8, 9

3.

Stem	Leaf
1	6
2	7, 9
3	4, 5, 5
4	6, 8
5	2, 8, 1, 1
6	7
7	2, 6, 3
8	5, 4, 3, 6
9	4, 8

4.

Stem	Leaf
3	5, 9
4	6, 3
5	8, 2, 9, 3
6	4, 3, 8, 3, 5
7	1

5.

Stem	Leaf
3	9, 5, 4, 6
4	7, 7, 1, 0, 3, 8, 5, 6, 0, 2, 3
5	8, 4, 2, 3, 4, 3, 9, 8, 6, 2, 0
6	0, 1, 3, 0, 4

6.

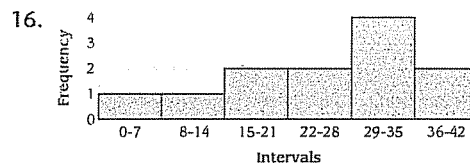
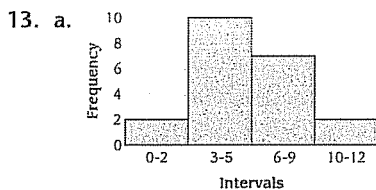
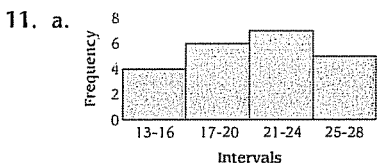
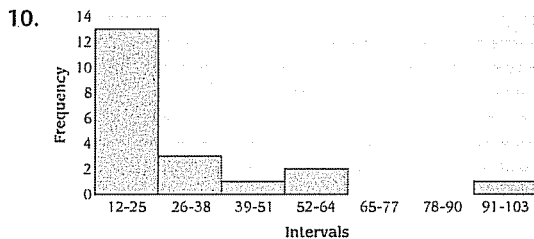
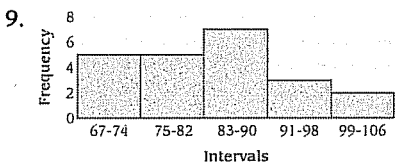
Stem	Leaf
1	6, 4
2	4
3	4, 2, 8, 5, 6
4	6, 3, 3
5	7, 3, 2, 8, 8, 6, 3, 1
6	5, 1, 4, 6, 4, 2
7	3

7.

Interval	Tally	Frequency	Relative Freq.
47-56		1	1/20 = 0.05
57-66		3	3/20 = 0.15
67-76		10	10/20 = 0.5
77-86		5	5/20 = 0.25
87-96		1	1/20 = 0.05

8.

Interval	Tally	Frequency	Relative Freq.
54-58		3	3/15 = 0.2
59-63		4	4/15 = 0.27
64-68		3	3/15 = 0.2
69-73		1	1/15 = 0.07
74-78		4	4/15 = 0.27

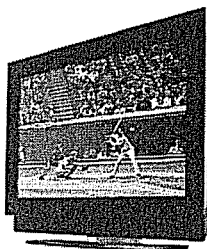


12. The following stem-and-leaf diagram shows test scores. Use the diagram to answer the questions.

Stem	Leaf
1	9
2	
3	
4	3, 8
5	
6	
7	8, 6, 4, 2
8	3, 4, 6, 6, 7, 8
9	1, 7, 6, 9, 3

- a. What was the lowest test score? 19
 b. What was the highest test score? 99
 c. What was the median test score? 85
 d. What is the range of the scores? 80
13. The frequency table shows the hours per week that each person in a class watches television. Use the table to work the following problems.

Interval	Frequency
0-2	2
3-5	10
6-9	7
10-12	2



- a. Create a histogram from the frequency table.
 b. How many students are in the class? 21
 c. What is the relative frequency of students that watch 3 to 5 hours of television? $\frac{10}{21} = 0.48$
 d. What is the relative frequency of students that watch 6 hours of television or more? $\frac{9}{21} = 0.43$

14. The stem-and-leaf diagram shows the scores for a midterm. Use the diagram to answer the following questions.

Stem	Leaf
1	6
2	3
3	3, 7
4	
5	
6	
7	2, 6, 3, 6
8	5, 4, 3, 6, 9
9	4, 8, 9

- a. What is the range of the test scores? 83
 b. What is the mode? 76
 c. What is the median of the test scores? 79.5
15. The stem-and-leaf diagram shows the age of students in a graduate class. Use the diagram to answer the following questions.
- a. What is the range of their ages? 29
 b. What is the median of their ages? 36
16. The stem-and-leaf diagram shows the football scores for a school's football team. Use the stem-and-leaf diagram to create a six-interval histogram.

Stem	Leaf
0	7
1	0, 9
2	1, 8, 6
3	3, 1, 5, 4
4	2, 0