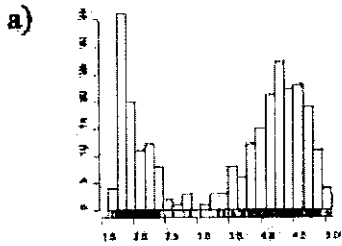


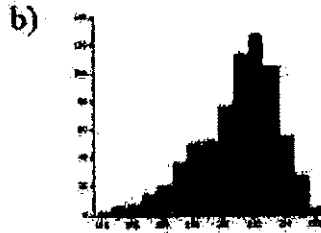
Name \_\_\_\_\_  
Date 2/27

# Stem and Leaf Dot Plot

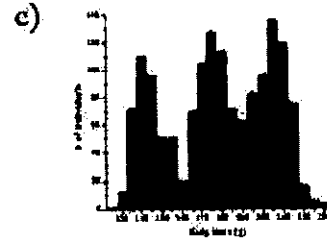
Describe the shape of each graph as Unimodal, Bimodal, or Multimodal.



Bimodal

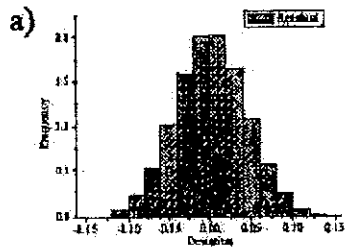


Unimodal

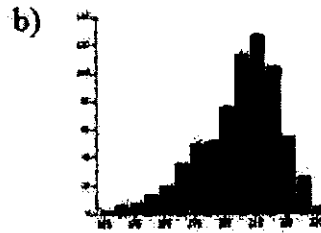


Multimodal

Describe the shape of each graph as Uniform, Symmetric, or Skewed.



Symmetric

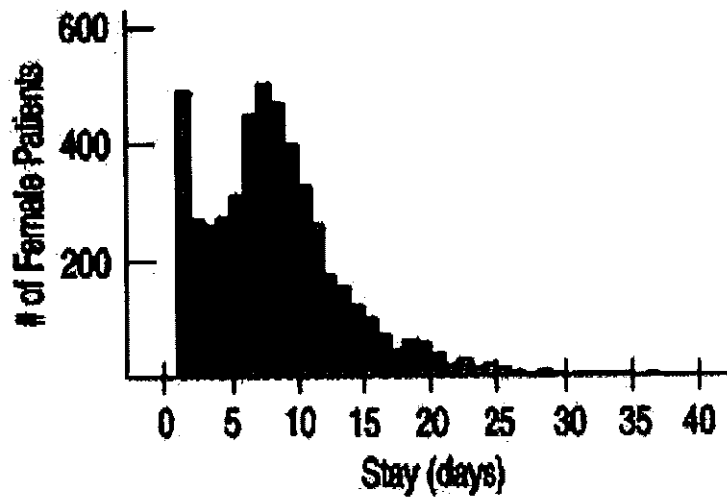


Skewed  
Left



Uniform

**Heart attack stays.** The histogram shows the lengths of hospital stays (in days) for all the female patients admitted to hospitals in New York during one year with a primary diagnosis of acute myocardial infarction (heart attack).



bimodal skewed right outliers  
2 peaks

a) Describe the distribution. (shape, center, spread, unusual features)

b) From the histogram, would you expect the mean or median to be larger? Explain. Mean

c) Why do you think there are so many people who stay for only one day? b/c of outliers to the right.

B/c it is a primary, so it's the first one.

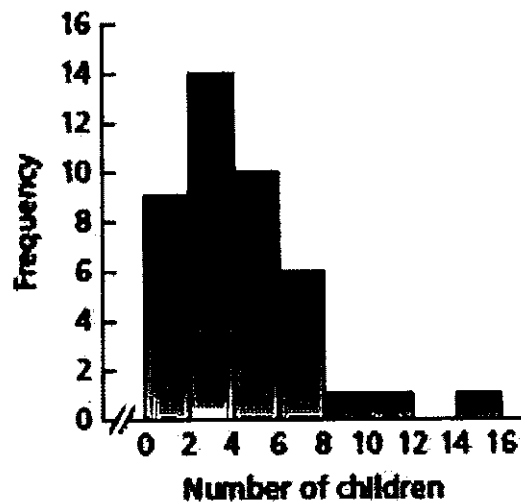
Could be a mis-diagnosis

Name \_\_\_\_\_  
Date \_\_\_\_\_

In each of Exercises 2.90–2.99, we have provided a graphical display of a data set. For each exercise,

- identify the overall shape of the distribution by referring to Fig. 2.9 on page 73.
- state whether the distribution is (roughly) symmetric, right skewed, or left skewed.

**2.90 Children of U.S. Presidents.** The *Information Please Almanac* provides the number of children of each of the U.S. presidents. A frequency histogram for number of children by president, through President George W. Bush, is as follows.



- One Peak
- Skewed right
- Gap at interval 12-14

Make stem-and-leaf plots for the given data.

- 20 1) ~~31, 48, 29, 34, 94, 36, 41, 45, 27, 49,~~  
~~58, 49, 36, 52, 48, 96, 50, 54, 38, 29~~

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

Key: 2|7 = 27

- 18 2) ~~8.7, 2.6, 9.5, 7.3, 8.4, 2.1, 9, 2.6, 6.7, 8.4,~~  
~~2.5, 9.3, 8.2, 2.2, 8.5, 7.8, 2.1, 8~~

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

Key: 8|5 = 8.5

1 For each of the following stem plots, describe the shape of the distribution of the data.

a

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

Key: 1|2 = 12

Symmetrical  
Single Peak

b

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

Key: 2|6 = 2.6

Skewed Left  
Single Peak

Use the stem and leaf plot to answer these questions.

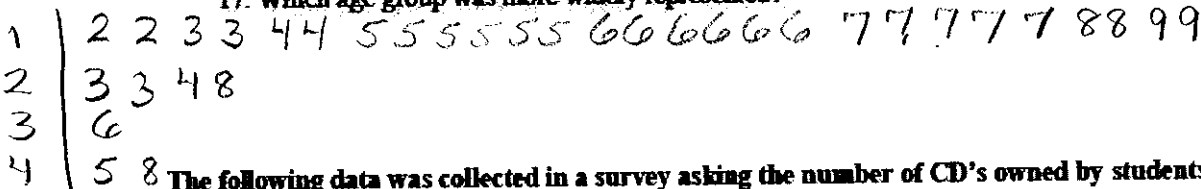
9. What is the best test score? 100  
 10. How many students took the test? 30  
 11. How many students scored 90? 2  
 12. What is the lowest score? 61  
 13. Find the difference between the high and low scores.  $100 - 61 = 39$

History Test Scores	
Stem	Leaf
6	1 1 4 6 7 8
7	2 3 5 7 9
8	1 3 5 6 6 7 7 8 9
9	0 0 3 4 6 8 9 9
10	0 0

Use the ages of the people who attended a gymnastics meet to complete 14-17.

14. Make a stem and leaf plot of the data.  
 15. How many people attended the meet? 34  
 16. What are the ages of the youngest and oldest persons attending? 12 48  
 17. Which age group was more widely represented?

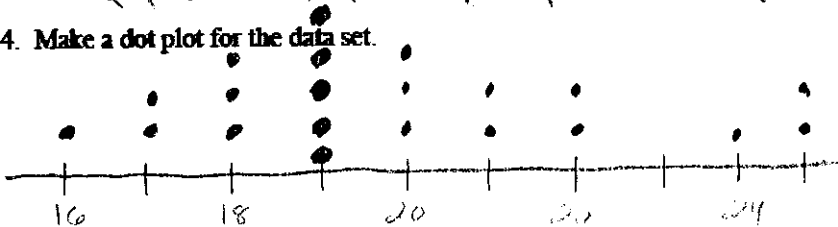
AGES: ~~12, 13, 15, 16, 17, 18,~~  
~~19, 20, 21, 22, 23, 24, 25,~~  
~~26, 27, 28, 29, 30, 31, 32, 33,~~  
~~34, 35, 36, 37, 38, 39,~~  
~~40, 41, 42, 43, 44, 45,~~  
~~46, 47, 48, 49~~



The following data was collected in a survey asking the number of CD's owned by students.

16, 22, 25, 18, 21, 17, 18, 17, 19, 20, 19, 22, 19, 18, 20, 19, 20, 21, 19, 25, 24

4. Make a dot plot for the data set.



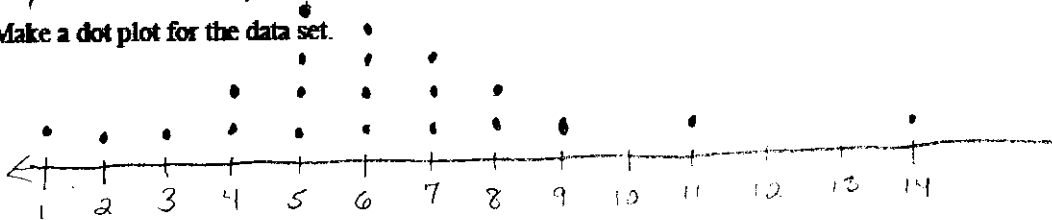
5. Determine the mode of the data.

19

Nathan asked his classmates to estimate the number of hours they spend doing homework each week. The following data shows the results of his survey.

9, 4, 8, 7, 7, 3, 5, 6, 7, 4, 7, 6, 8, 5, 6, 5, 6, 7, 11, 14, 6

6. Make a dot plot for the data set.



7. Determine the range of the data.

$(14 - 1) = 13$