

# Chapter 2 Exam A

Name \_\_\_\_\_

**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.

**Provide an appropriate response.**

- 1) Create an example displaying data in a pie chart. Display the same data in a Pareto chart. Which graph is more effective? List at least two reasons in support of your choice. 1) \_\_\_\_\_

**Use the given data to construct a frequency distribution.**

- 2) A school district performed a study to find the main causes leading to its students dropping out of school. Thirty cases were analyzed, and a primary cause was assigned to each case. The causes included unexcused absences (U), illness (I), family problems (F), and other causes (O). The results for the thirty cases are listed below: 2) \_\_\_\_\_

U U U I F O O U I F  
 F O U I I F I I O U  
 I F F U U I I O F U

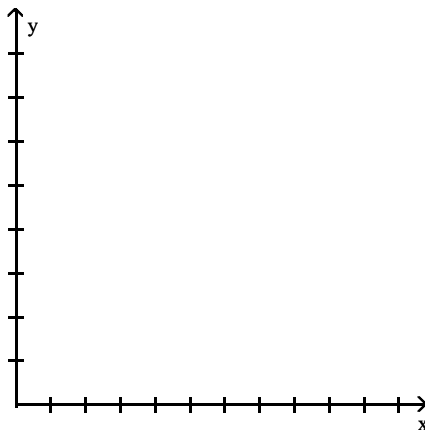
Construct a table summarizing the frequency distribution of the primary causes leading to student dropout.

Cause	Frequency

**Provide an appropriate response.**

- 3) Use the high closing values of Naristar Inc. stock from the years 1992 - 2003 to construct a time-series graph. (Let  $x = 0$  represent 1992 and so on.) Identify a trend. 3) \_\_\_\_\_

Year	High	Year	High
1992	48	1998	62
1993	53	1999	60
1994	47	2000	68
1995	55	2001	42
1996	58	2002	51
1997	61	2003	78

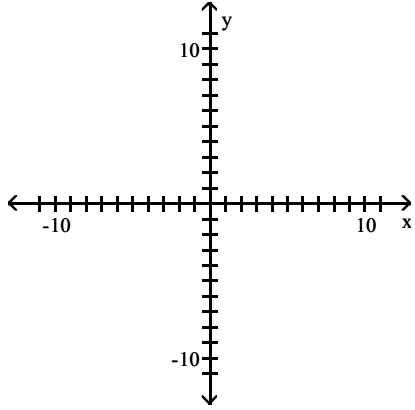


**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

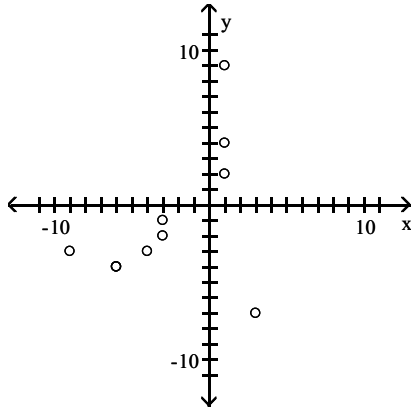
Use the given paired data to construct a scatterplot.

4) x -1 -4 -3 -3 -7 4 2 9 -4 -2  
 y -3 -6 -4 -9 3 1 1 1 -6 -3

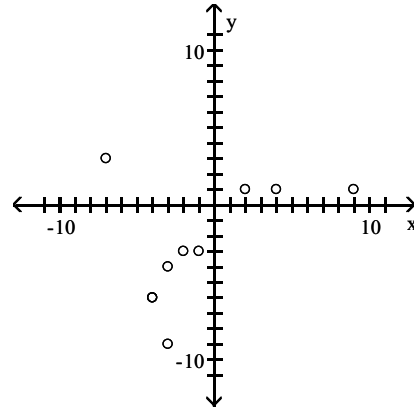
4) \_\_\_\_\_



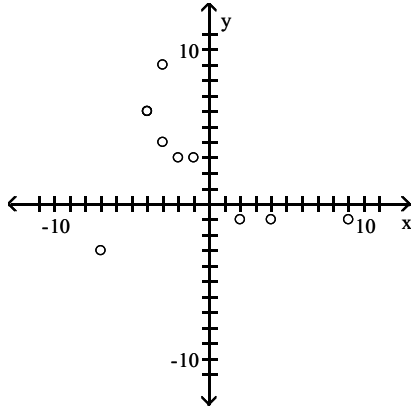
A)



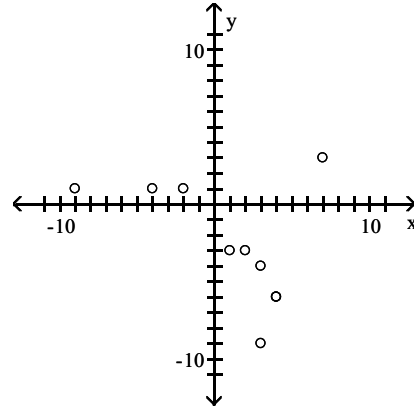
B)



C)



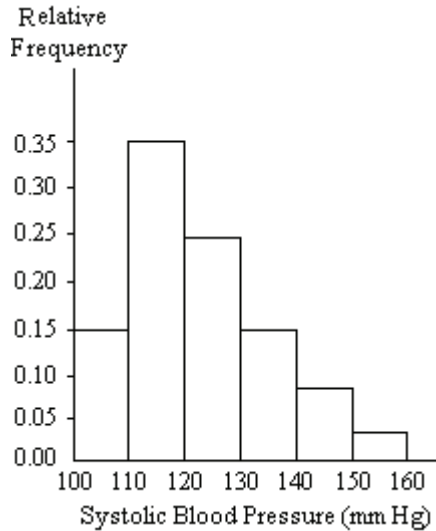
D)



**Provide an appropriate response.**

- 5) A nurse measured the blood pressure of each person who visited her clinic. Following is a relative-frequency histogram for the systolic blood pressure readings for those people aged between 25 and 40. The blood pressure readings were given to the nearest whole number. Approximately what percentage of the people aged 25–40 had a systolic blood pressure reading between 110 and 119 inclusive?

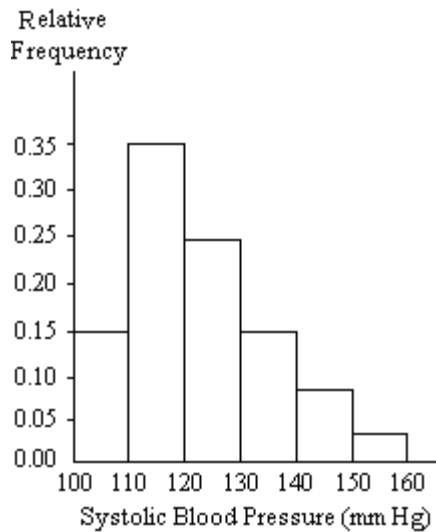
5) \_\_\_\_\_



- A) 0.35%                      B) 3.5%                      C) 30%                      D) 35%

- 6) A nurse measured the blood pressure of each person who visited her clinic. Following is a relative-frequency histogram for the systolic blood pressure readings for those people aged between 25 and 40. The blood pressure readings were given to the nearest whole number. Approximately what percentage of the people aged 25–40 had a systolic blood pressure reading between 110 and 139 inclusive?

6) \_\_\_\_\_



- A) 75%                      B) 89%                      C) 59%                      D) 39%

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

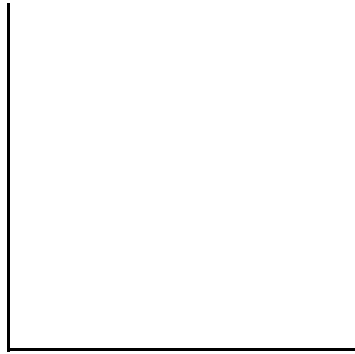
- 7) Describe at least two advantages to using stemplots rather than frequency distributions.

7) \_\_\_\_\_

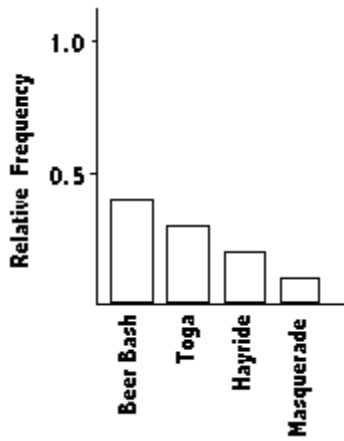
**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

**Solve the problem.**

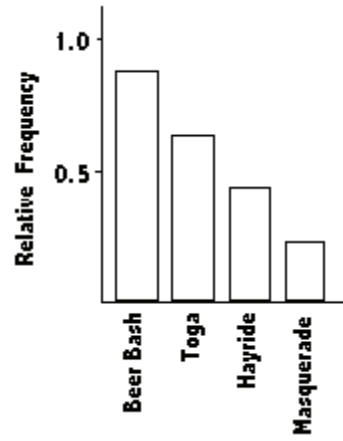
- 8) The Kappa Iota Sigma Fraternity polled its members on the weekend party theme. The vote was as follows: six for toga, four for hayride, eight for beer bash, and two for masquerade. Display the vote count in a Pareto chart. 8) \_\_\_\_\_



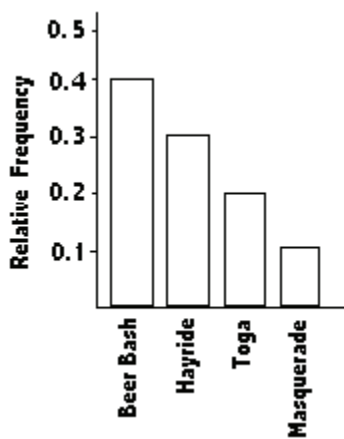
A)



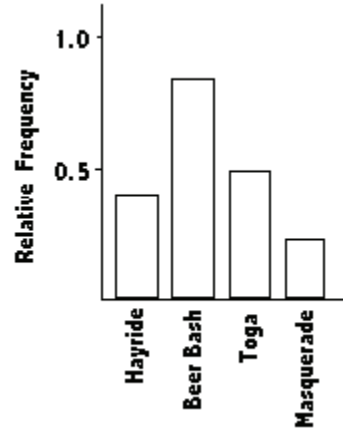
B)



C)



D)

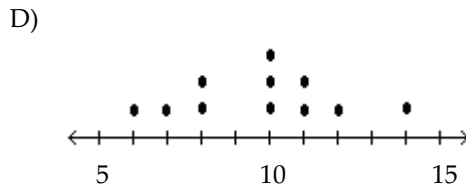
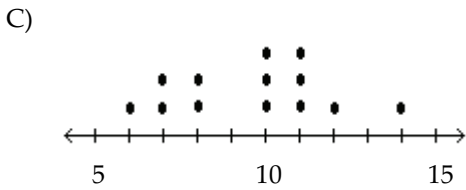
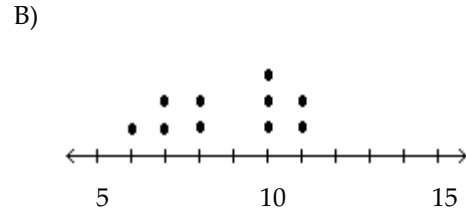
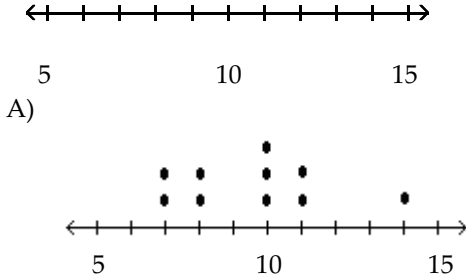


**Construct the dotplot for the given data.**

9) A store manager counts the number of customers who make a purchase in his store each day. The data are as follows.

10 11 8 14 7 10 10 11 8 7

9) \_\_\_\_\_

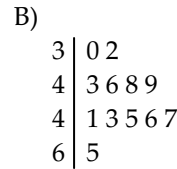
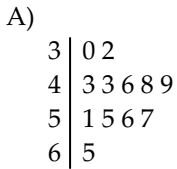


**Use the data to create a stemplot.**

10) The following data show the number of laps run by each participant in a marathon.

46 65 55 43 51 48 57 30 43 49 32 56

10) \_\_\_\_\_



**Provide an appropriate response.**

11) The frequency distribution below summarizes employee years of service for Alpha Corporation. Find the class boundaries for class 26–30.

11) \_\_\_\_\_

Years of service	Frequency
1–5	5
6–10	20
11–15	25
16–20	10
21–25	5
26–30	3

A) 26.5, 30.5

B) 26.5, 29.5

C) 25.5, 30.5

D) 25.5, 20.5

Construct the cumulative frequency distribution that corresponds to the given frequency distribution.

12)

12) \_\_\_\_\_

Speed	Number of cars
0-29	4
30-59	16
60-89	60
90-119	20

A)

Speed	Cumulative Frequency
Less than 30	4
Less than 60	20
Less than 90	80
Less than 120	100

B)

Speed	Cumulative Frequency
Less than 30	0.04
Less than 60	0.20
Less than 90	0.80
Less than 120	1.00

C)

Speed	Cumulative Frequency
0-29	4
30-59	20
60-89	80
90-119	100

D)

Speed	Cumulative Frequency
Less than 30	100
Less than 60	80
Less than 90	82
Less than 120	4

Provide an appropriate response.

13) The following frequency distribution analyzes the scores on a math test. Find the class midpoint of scores interval 40-59.

13) \_\_\_\_\_

Scores	Number of students
40-59	2
60-75	4
76-82	6
83-94	15
95-99	5

A) 50.5

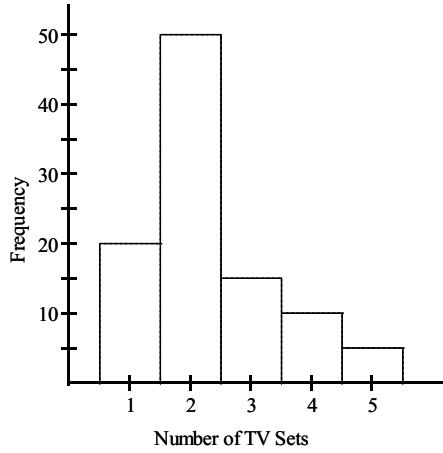
B) 48.5

C) 49.5

D) 49.0

14) The histogram below represents the number of television sets per household for a sample of U.S. households. What is the minimum number of households having the same number of television sets?

14) \_\_\_\_\_



A) 1

B) 100

C) 20

D) 5

**Use the data to create a stemplot.**

15) The weights of 22 members of the varsity football team are listed below.

15) \_\_\_\_\_

144 152 142 151 160 152 131 164 141 153 140  
144 175 156 147 133 172 159 135 159 148 171

A)

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

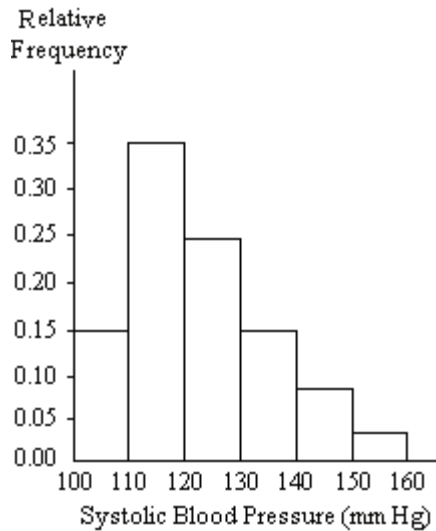
B)

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

**Provide an appropriate response.**

- 16) A nurse measured the blood pressure of each person who visited her clinic. Following is a relative-frequency histogram for the systolic blood pressure readings for those people aged between 25 and 40. The blood pressure readings were given to the nearest whole number. What class width was used to construct the relative frequency distribution?

16) \_\_\_\_\_



- A) 11                                      B) 9                                      C) 10                                      D) 100

- 17) The following frequency distribution analyzes the scores on a math test. Find the class boundaries of scores interval 95–99.

17) \_\_\_\_\_

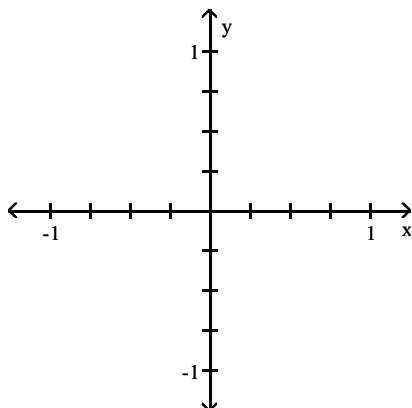
Scores	Number of students
40–59	2
60–75	4
76–82	6
83–94	15
95–99	5

- A) 94.5, 100.5                      B) 95.5, 100.5                      C) 95.5, 99.5                      D) 94.5, 99.5

**Use the given paired data to construct a scatterplot.**

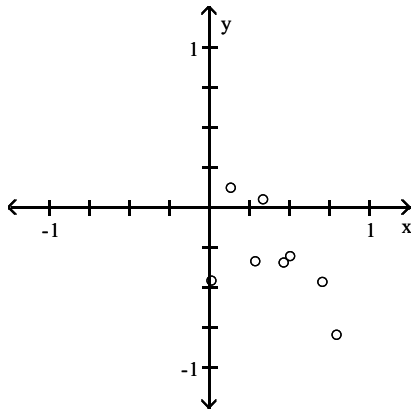
- 18) x 0.51 0.02 0.14 0.29 0.34 0.8 0.47 0.71  
y 0.31 0.46 -0.12 0.34 -0.05 0.8 0.35 0.47

18) \_\_\_\_\_

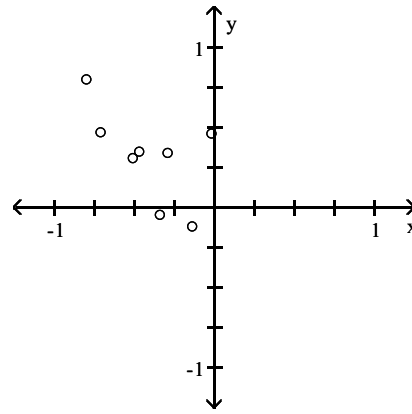




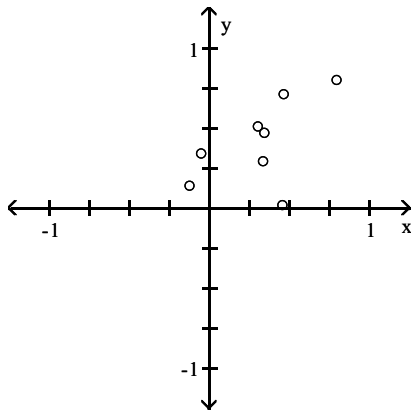
A)



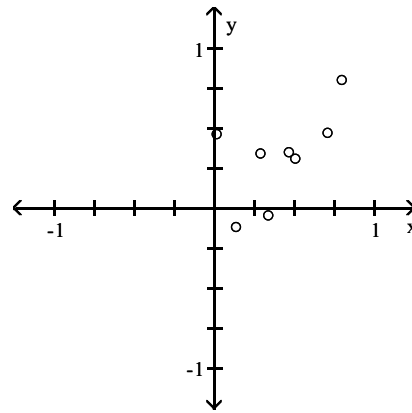
B)



C)



D)



Construct the cumulative frequency distribution that corresponds to the given frequency distribution.

19)

19) \_\_\_\_\_

Weight (oz)	Number of Stones
1.2-1.6	5
1.7-2.1	2
2.2-2.6	5
2.7-3.1	5
3.2-3.6	13

A)

Weight (oz)	Cumulative Frequency
1.2-1.6	5
1.7-2.1	7
2.2-2.6	12
2.7-3.1	17
3.2-3.6	30

B)

Weight (oz)	Cumulative Frequency
Less than 2.2	7
Less than 3.2	17
Less than 3.7	30

C)

Weight (oz)	Cumulative Frequency
Less than 1.7	5
Less than 2.2	7
Less than 2.7	12
Less than 3.2	17
Less than 3.7	30

D)

Weight (oz)	Cumulative Frequency
Less than 1.7	5
Less than 2.2	7
Less than 2.7	12
Less than 3.2	17
Less than 3.7	28

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

**Use the given data to construct a frequency distribution.**

20) The following figures represent Jennifer's monthly charges for long distance telephone calls for the past twelve months. 20) \_\_\_\_\_

7.12 10.40 14.70 18.24  
10.48 16.47 7.53 15.45  
13.04 15.48 13.33 12.56

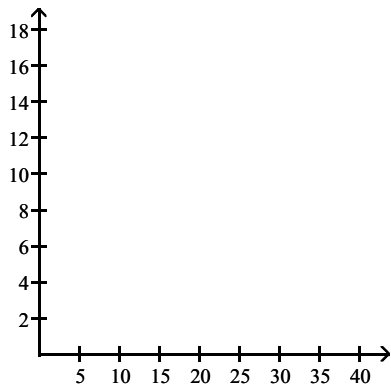
Construct a frequency distribution with 4 classes.

Charges	Frequency

**Solve the problem.**

21) The data shows the roundtrip mileage that 43 randomly selected students drive to school each day. Construct a frequency polygon. Applying a loose interpretation of the requirements for a normal distribution, do the mileages appear to be normally distributed? Why or why not? 21) \_\_\_\_\_

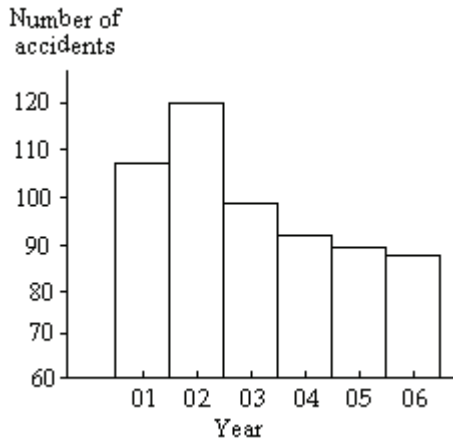
Miles	Frequency
10-14	0
15-19	6
20-24	9
25-29	21
30-34	7



**Provide an appropriate response.**

22) The graph below shows the number of car accidents occurring in one city in each of the years 2001 through 2006. The number of accidents dropped in 2003 after a new speed limit was imposed. Does the graph distort the data? How would you redesign the graph to be less misleading?

22) \_\_\_\_\_



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

**Use the data to create a stemplot.**

23) The attendance counts for this season's basketball games are listed below.

23) \_\_\_\_\_

227 239 215 219  
221 233 229 233  
235 228 245 231

A)

21	5 9
22	1 7 8 9
23	1 3 3 5 9
24	5

B)

21	5 7 9
22	1 8 9
23	1 3 3 5 9
24	5

**Provide an appropriate response.**

24) The frequency distribution below summarizes employee years of service for Alpha Corporation. Find the class midpoint for class 1-5.

24) \_\_\_\_\_

Years of service	Frequency
1-5	5
6-10	20
11-15	25
16-20	10
21-25	5
26-30	3

A) 3.5

B) 3.0

C) 5.0

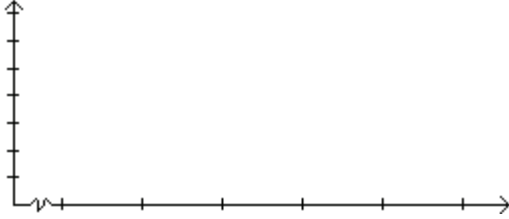
D) 2.5

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

25) In a survey, 26 voters were asked their ages. The results are shown below. Construct a histogram to represent the data (with 5 classes beginning with a lower class limit of 19.5 and a class width of 10). What is the approximate age at the center?

25) \_\_\_\_\_

43 56 28 63 67 66 52 48 37 51 40 60 62  
66 45 21 35 49 32 53 61 53 69 31 48 59



# Answer Key

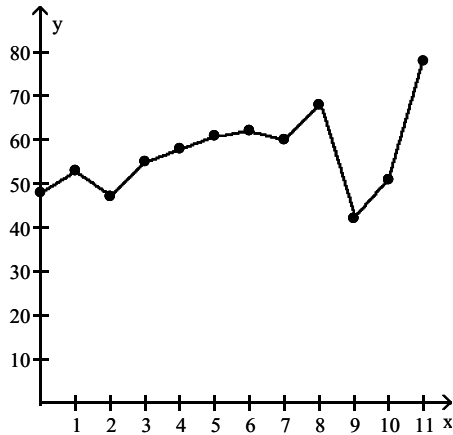
## Testname: CHAPTER 2 EXAM A

1) Answers will vary. The answer should include the fact that pie charts are better for showing categories that are parts of a whole, whereas Pareto charts are better for displaying relative importance among categories.

2)

Cause	Frequency
U	9
I	9
F	7
O	5

3) Trend: Answers will vary. Possible answer: Except for a drop in high closing value in 1994, there was a steady rise through 2000, after which there was a sharp drop in 2001 followed by increases through 2003.



4) B

5) D

6) A

7) Answers will vary. Possible answer: The shape of a distribution can readily be seen. The plot can be drawn quicker, since class width need not be calculated.

8) A

9) A

10) A

11) C

12) A

13) C

14) D

15) A

16) C

17) D

18) D

19) C

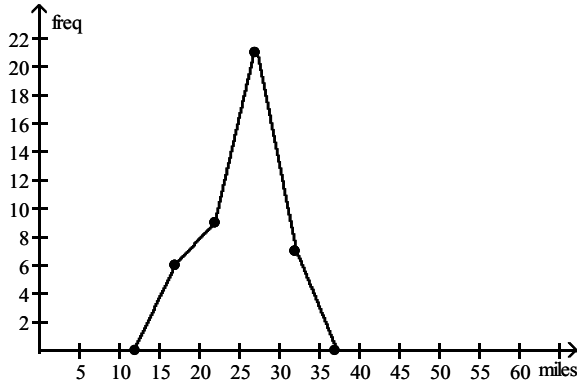
20)

Charges	Frequency
7.00-9.99	2
10.00-12.99	3
13.00-15.99	5
16.00-18.99	2

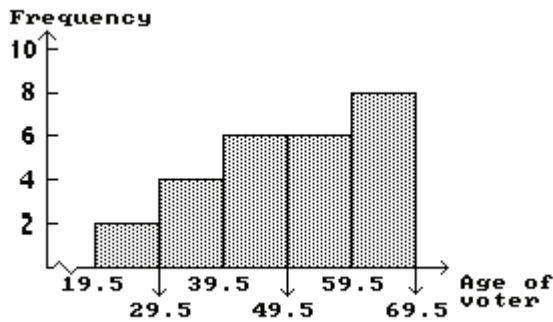
Answer Key

Testname: CHAPTER 2 EXAM A

- 21) The frequency polygon appears to roughly approximate a normal distribution. The frequencies increase to a maximum and then decrease, and the graph is symmetric with the left half being roughly a mirror image of the right half.



- 22) The graph distorts the data because the the vertical scale starts at 60 rather than 0, giving the impression of a large difference in the number of accidents, when actually the number of accidents only varies from 90 to 120. To make the graph less misleading, change the vertical scale so that it begins at 0 and increases in increments of 20.
- 23) A
- 24) B
- 25) The approximate age at the center is 50.



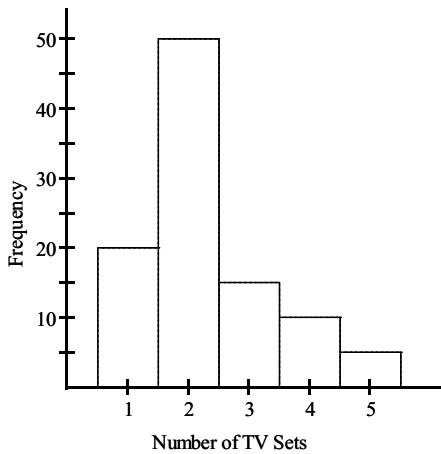
# Chapter 2 Exam B

Name \_\_\_\_\_

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

**Provide an appropriate response.**

- 1) The histogram below represents the number of television sets per household for a sample of U.S. households. What is the minimum number of households having the same number of television sets? 1) \_\_\_\_\_



- A) 5                                      B) 1                                      C) 20                                      D) 100

**Use the data to create a stemplot.**

- 2) The following data consists of the weights (in pounds) of 15 randomly selected women and the weights of 15 randomly selected men. Construct a back-to-back stemplot for the data. 2) \_\_\_\_\_

Women: 128    150    118    166    142  
           122    137    110    175    152  
           145    126    139    111    170

Men:     140    153    199    186    169  
           136    176    162    196    155  
           173    190    141    166    153

A)

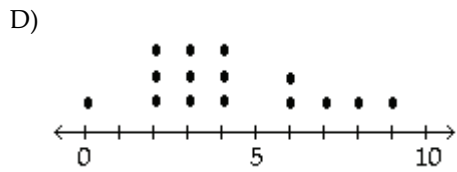
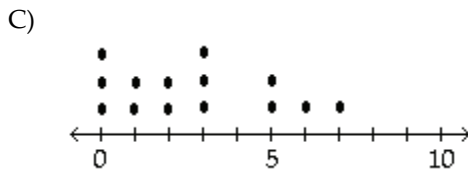
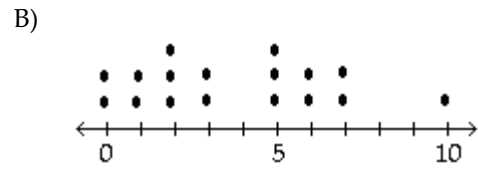
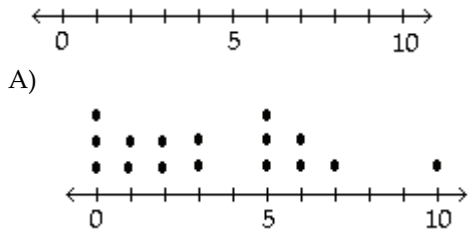
Men	Women
	11 0 1 8
	12 2 6 8
6	13 7 9
1 0	14 2 5
5 3 3	15 0 2
9 6 2	16 6
6 3	17 0 5
6	18
9 6 0	19

B)

Men	Women
	11 0 1
	12 2 6 8
6	13 7 9
1 0	14 2 5
5 3 3	15 0 2 4
9 6 2	16 6
6 3	17 0 5
9 6	18
9 6	19

**Construct the dotplot for the given data.**

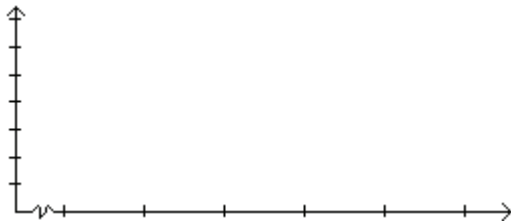
- 3) Attendance records at a school show the number of days each student was absent during the year. 3) \_\_\_\_\_  
 The days absent for each student were as follows.  
 0 2 3 4 2 3 4 6 7 2 3 4 6 9 8



**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

**Provide an appropriate response.**

- 4) In a survey, 20 people were asked how many magazines they had purchased during the previous year. The results are shown below. Construct a histogram to represent the data. 4) \_\_\_\_\_  
 Use 4 classes with a class width of 10, and begin with a lower class limit of  $-0.5$ . What is the approximate amount at the center?  
 6 15 3 36 25 18 12 18 5 30  
 24 7 0 22 33 24 19 4 12 9



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

- 5) The frequency distribution below summarizes the home sale prices in the city of Summerhill for the month of June. Determine the width of each class. 5) \_\_\_\_\_

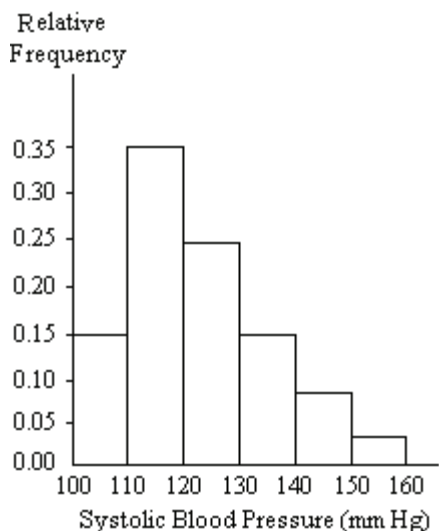
(Sale price in thousand \$)	Frequency
80.0 - 110.9	2
111.0 - 141.9	5
142.0 - 172.9	7
173.0 - 203.9	10
204.0 - 234.9	3
235.0 - 265.9	1

- A) 61                      B) 31                      C) 28                      D) 30



6) A nurse measured the blood pressure of each person who visited her clinic. Following is a relative-frequency histogram for the systolic blood pressure readings for those people aged between 25 and 40. The blood pressure readings were given to the nearest whole number. Approximately what percentage of the people aged 25–40 had a systolic blood pressure reading between 110 and 139 inclusive?

6) \_\_\_\_\_



- A) 59%                      B) 39%                      C) 89%                      D) 75%

7) The following frequency distribution analyzes the scores on a math test. Find the class midpoint of scores interval 95–99.

7) \_\_\_\_\_

Scores	Number of students
40–59	2
60–75	4
76–82	6
83–94	15
95–99	5

- A) 97.5                      B) 97.0                      C) 96.5                      D) 98.0

**Use the data to create a stemplot.**

8) The ages of the 45 members of a track and field team are listed below. Construct an expanded stemplot with about 8 rows.

8) \_\_\_\_\_

21 18 42 35 32 21 44 25 38 48 14 19 23 22 28  
 32 34 27 31 17 16 41 37 22 24 33 32 21 26 30  
 22 27 32 30 20 18 17 21 15 26 36 31 40 16 25

A)

```

1 | 4
1 | 5 6 6 7 7 8 8 9
2 | 0 1 1 1 1 2 2 2 3 4
2 | 5 5 6 6 7 7 8
3 | 0 0 1 1 2 2 2 2 3 4
3 | 5 6 7 8
4 | 0 1 2 4
4 | 8
    
```

B)

```

1 | 4 5
1 | 5 6 6 7 7 8 8 9
2 | 0 1 1 1 1 2 2 2 3 4 5 5
2 | 5 5 6 6 7 7 8
3 | 0 0 1 1 2 2 2 2 3 4 5
3 | 5 6 7 8
4 | 0 1 2 4
4 | 8
    
```

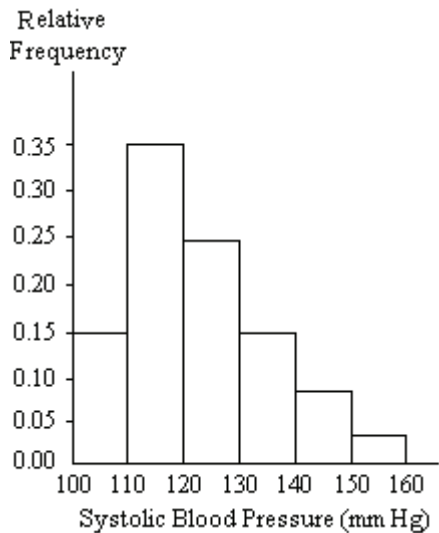
**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

**Provide an appropriate response.**

- 9) Suppose that a data set has a minimum value of 24 and a maximum of 79 and that you want 5 classes. Explain how to find the class width for this frequency table. What happens if you mistakenly use a class width of 11 instead of 12? 9) \_\_\_\_\_

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

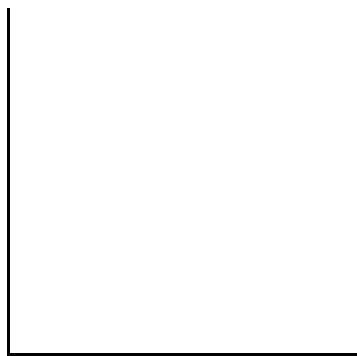
- 10) A nurse measured the blood pressure of each person who visited her clinic. Following is a relative-frequency histogram for the systolic blood pressure readings for those people aged between 25 and 40. The blood pressure readings were given to the nearest whole number. Approximately what percentage of the people aged 25–40 had a systolic blood pressure reading between 110 and 119 inclusive? 10) \_\_\_\_\_



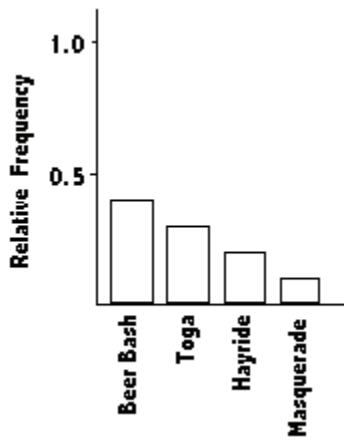
- A) 35%                      B) 0.35%                      C) 3.5%                      D) 30%

**Solve the problem.**

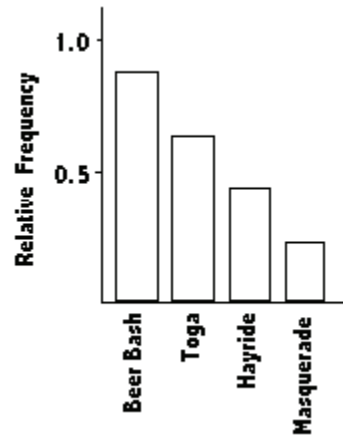
- 11) The Kappa Iota Sigma Fraternity polled its members on the weekend party theme. The vote was as follows: six for toga, four for hayride, eight for beer bash, and two for masquerade. Display the vote count in a Pareto chart. 11) \_\_\_\_\_



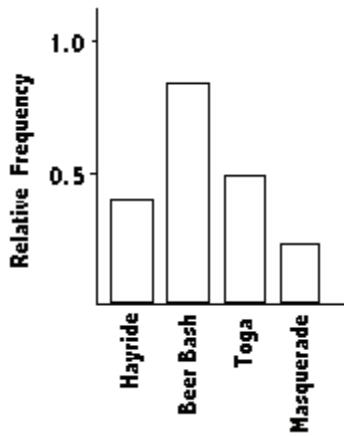
A)



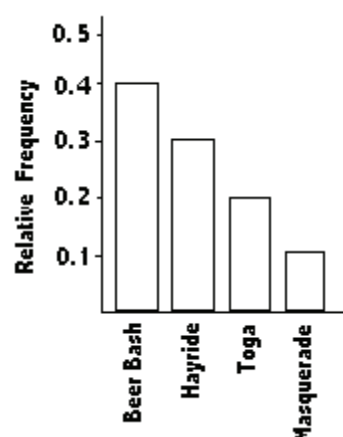
B)



C)



D)



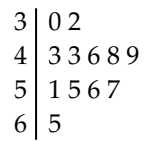
Use the data to create a stemplot.

12) The following data show the number of laps run by each participant in a marathon.

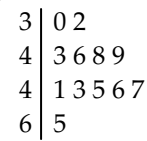
46 65 55 43 51 48 57 30 43 49 32 56

12) \_\_\_\_\_

A)



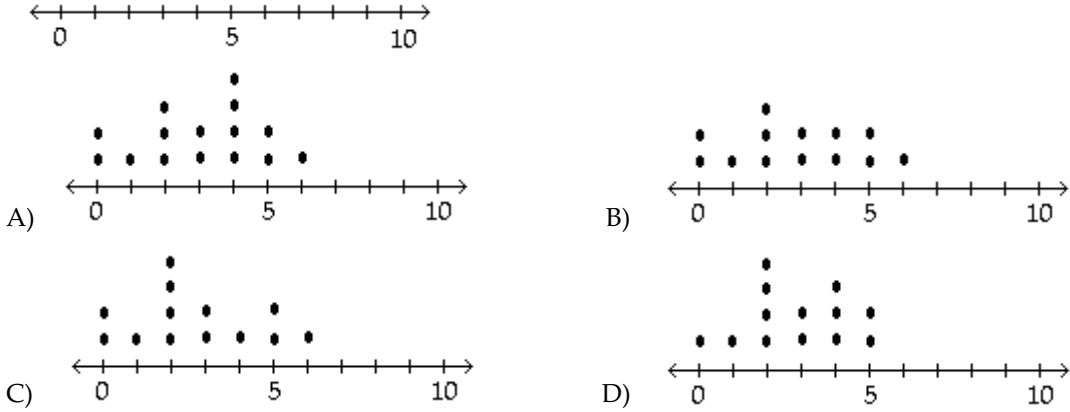
B)



**Construct the dotplot for the given data.**

- 13) A manufacturer records the number of errors each work station makes during the week. The data are as follows. 13) \_\_\_\_\_

6 3 2 3 5 2 0 2 5 4 2 0 1



**Provide an appropriate response.**

- 14) The following frequency distribution analyzes the scores on a math test. Find the class boundaries of scores interval 40–59. 14) \_\_\_\_\_

Scores	Number of students
40–59	2
60–75	4
76–82	6
83–94	15
95–99	5

- A) 39.5, 59.5      B) 40.5, 59.5      C) 39.5, 58.5      D) 40.5, 58.5

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

**Use the given data to construct a frequency distribution.**

- 15) Kevin asked some of his friends how many hours they had worked during the previous week at their after-school jobs. The results are shown below. 15) \_\_\_\_\_

5 6 5 4 5 5 9 8 5 3 7 6  
6 7 5 6 7 5 6 8 6 7 8 4

Construct a frequency distribution. Use 4 classes, a class width of 2 hours, and a lower limit of 3 for class 1.

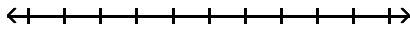
Hours	Frequency

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

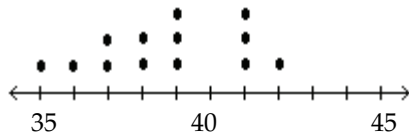
**Construct the dotplot for the given data.**

16) The following data represent the number of cars passing through a toll booth during a certain time period over a number of days. 16) \_\_\_\_\_

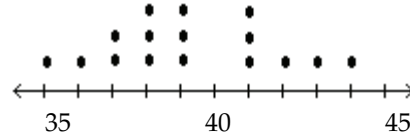
38 39 37 37 44 38 41 38 39 35 42 39 43 37 41



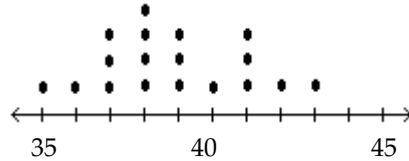
A) 35 40 45



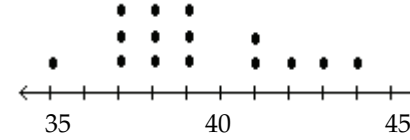
B)



C)



D)



**Provide an appropriate response.**

17) The frequency distribution below summarizes employee years of service for Alpha Corporation. 17) \_\_\_\_\_  
Determine the width of each class.

Years of service	Frequency
1-5	5
6-10	20
11-15	25
16-20	10
21-25	5
26-30	3

A) 5

B) 6

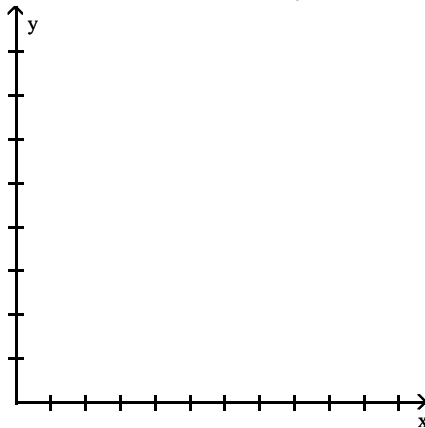
C) 4

D) 10

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

18) Use the high closing values of Naristar Inc. stock from the years 1992 - 2003 to construct a time-series graph. (Let  $x = 0$  represent 1992 and so on.) Identify a trend. 18) \_\_\_\_\_

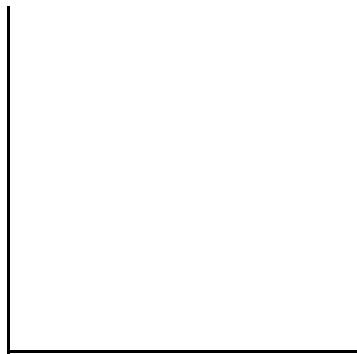
Year	High	Year	High
1992	48	1998	62
1993	53	1999	60
1994	47	2000	68
1995	55	2001	42
1996	58	2002	51
1997	61	2003	78



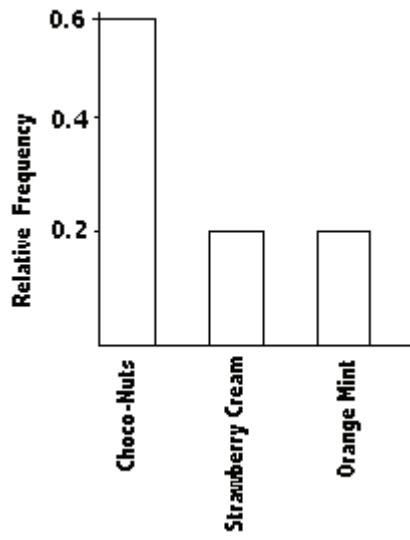
**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

**Solve the problem.**

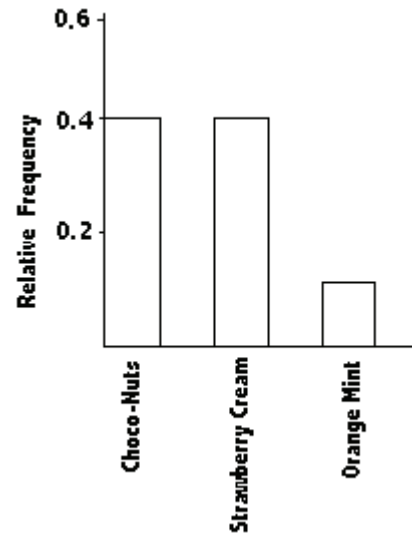
19) Wagenlucht Ice Cream Company is always trying to create new flavors of ice cream. They are market testing three kinds to find out which one has the best chance of becoming popular. They give small samples of each to 20 people at a grocery store. 4 ice cream tasters preferred the Strawberry Cream, 12 preferred Choco-Nuts, and 4 loved the Orange Mint. Construct a Pareto chart to represent these preferences. Choose the vertical scale so that the relative frequencies are represented. 19) \_\_\_\_\_



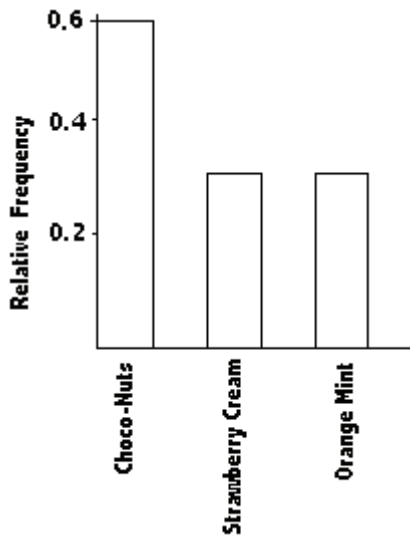
A)



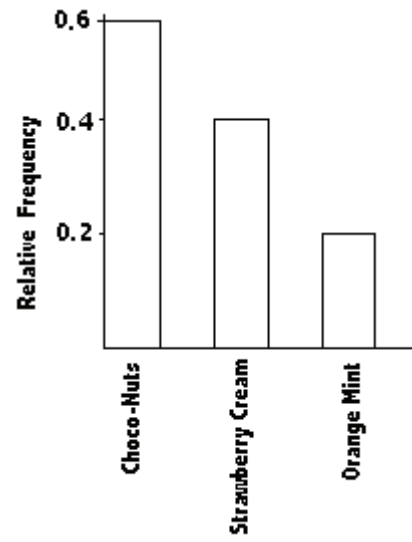
B)



C)



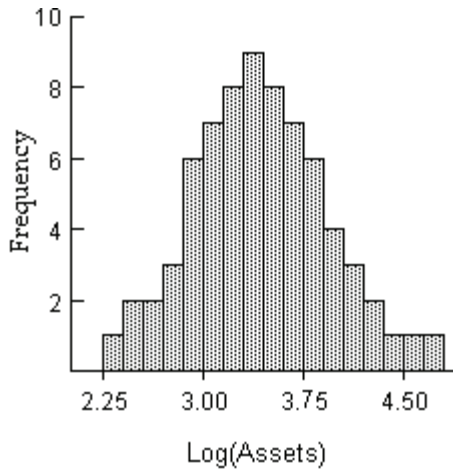
D)



**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

**Provide an appropriate response.**

- 20) The histogram below shows the distribution of the assets (in millions of dollars) of 71 companies. Does the distribution appear to be normal? 20) \_\_\_\_\_



**Use the given data to construct a frequency distribution.**

- 21) A school district performed a study to find the main causes leading to its students dropping out of school. Thirty cases were analyzed, and a primary cause was assigned to each case. The causes included unexcused absences (U), illness (I), family problems (F), and other causes (O). The results for the thirty cases are listed below: 21) \_\_\_\_\_

U U U I F O O U I F  
 F O U I I F I I O U  
 I F F U U I I O F U

Construct a table summarizing the frequency distribution of the primary causes leading to student dropout.

Cause	Frequency

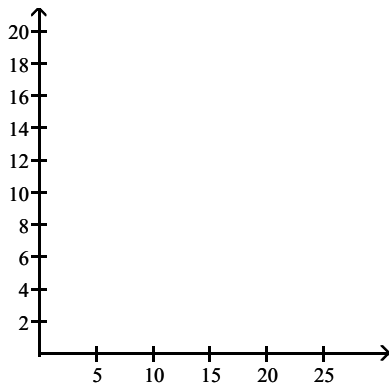


**Solve the problem.**

- 22) The frequency table below shows the amount of weight loss during the first month of a diet program for a group of men. Constructing a frequency polygon. Applying a loose interpretation of the requirements for a normal distribution, do the pounds of weight loss appear to be normally distributed? Why or why not?

22) \_\_\_\_\_

Weight (lb)	Frequency
5-7	2
8-10	9
11-13	18
14-16	13
17-19	4
20-22	1



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

**Provide an appropriate response.**

- 23) The frequency distribution below summarizes the home sale prices in the city of Summerhill for the month of June. Determine the class midpoint for class 235.0–265.9.

23) \_\_\_\_\_

(Sale price in thousand \$)	Frequency
80.0 - 110.9	2
111.0 - 141.9	5
142.0 - 172.9	7
173.0 - 203.9	10
204.0 - 234.9	3
235.0 - 265.9	1

A) 250.40

B) 250.55

C) 250.45

D) 250.50

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

- 24) Explain in your own words why a bar graph can be misleading if one or both of the scales begin at some value other than zero.

24) \_\_\_\_\_

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

**Construct the cumulative frequency distribution that corresponds to the given frequency distribution.**

25)

25) \_\_\_\_\_

Speed	Number of cars
0-29	4
30-59	16
60-89	60
90-119	20

A)

Speed	Cumulative Frequency
Less than 30	0.04
Less than 60	0.20
Less than 90	0.80
Less than 120	1.00

B)

Speed	Cumulative Frequency
Less than 30	4
Less than 60	20
Less than 90	80
Less than 120	100

C)

Speed	Cumulative Frequency
0-29	4
30-59	20
60-89	80
90-119	100

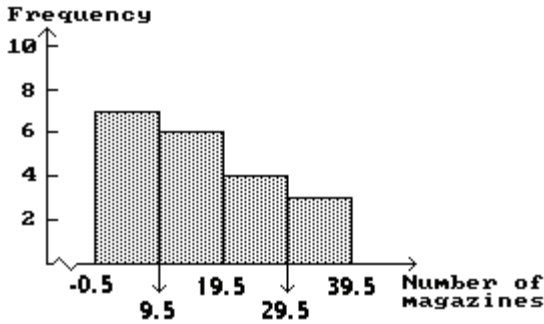
D)

Speed	Cumulative Frequency
Less than 30	100
Less than 60	80
Less than 90	82
Less than 120	4

# Answer Key

## Testname: CHAPTER 2 EXAM B

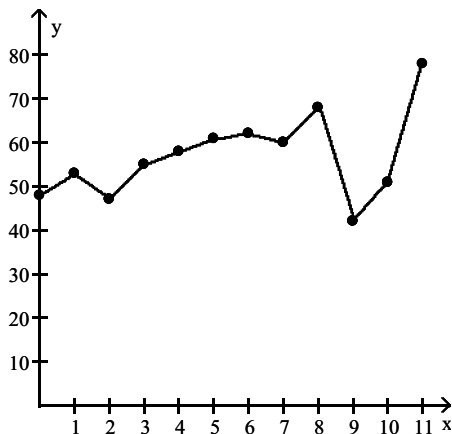
- 1) A
- 2) A
- 3) D
- 4) The approximate amount at the center is 16 magazines.



- 5) B
- 6) D
- 7) B
- 8) A
- 9) Since the range is  $79 - 24 = 55$ , and 55 divided by 5 equals 11, a whole number, the class width has to be widened from 11 to 12. If the class width was 11 data values equal to 79 would not be included in the frequency distribution.
- 10) A
- 11) A
- 12) A
- 13) C
- 14) A
- 15)

Hours	Frequency
3-4	3
5-6	13
7-8	7
9-10	1

- 16) D
- 17) A
- 18) Trend: Answers will vary. Possible answer: Except for a drop in high closing value in 1994, there was a steady rise through 2000, after which there was a sharp drop in 2001 followed by increases through 2003.



- 19) A

Answer Key

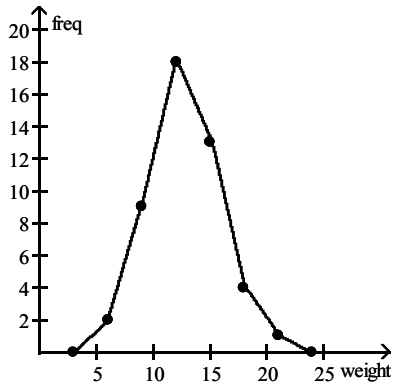
Testname: CHAPTER 2 EXAM B

20) Yes, it appears to be normal.

21)

Cause	Frequency
U	9
I	9
F	7
O	5

22) The frequency polygon appears to roughly approximate a normal distribution. The frequencies increase to a maximum and then decrease, and the graph is symmetric with the left half being roughly a mirror image of the right half.



23) C

24) A bar graph with these characteristics exaggerates the differences in the data.

25) B

