

1. What is the total number of scores for the distribution below? **10e-gravetter**

X	f
4	7
3	5
2	4
1	2

- a. 4
- b. 10
- c. 18
- d. 39

ANSWER: c

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

2. A sample of $n = 12$ scores ranges from a high of $X = 7$ to a low of $X = 4$. If these scores are placed in a frequency distribution table, how many X values will be listed in the first column?

- a. 4
- b. 12
- c. 3
- d. 7

ANSWER: a

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

3. For the following data, $N =$ _____.

X	f
4	2
3	3
2	1
1	2

- a. 8.
- b. 10.
- c. 20.
- d. 18.

ANSWER: a

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

4. For the data in the following table, what is the value of ΣX ?

X	f
4	1
3	0
2	2

1 1

- a. 4
- b. 9
- c. 10
- d. 13

ANSWER: b

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

5. For the scores in the following table, what is the value of ΣX^2 ?

X	f
3	1
2	2
1	4

- a. 23
- b. 15
- c. 11
- d. 21

ANSWER: d

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

6. For the following frequency distribution of quiz scores, how many individuals took the quiz?

X	f
5	6
4	5
3	5
2	3
1	2

- a. 5
- b. 21
- c. 15
- d. 14

ANSWER: b

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

7. For the following distribution of quiz scores, if a score of $X = 4$ or lower is a failing grade, how many individuals failed the quiz?

X	f
6	3
5	6
4	5

3 5
2 3
1 2

- a. 9
- b. 14
- c. 10
- d. 15

ANSWER: d

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

8. For the following distribution of quiz scores, how many individuals had a score of $X = 4$?

X	f
6	1
5	6
4	4
3	4
2	2
1	2

- a. 4
- b. 2
- c. 5
- d. 6

ANSWER: a

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

9. A researcher surveys a sample of $n = 10$ adults and asks them to indicate their favorite day of the week. If the data were organized in a frequency distribution table, what would be included in the first column?

- a. a list of students
- b. a list of days of the week
- c. a list of frequencies
- d. a list of averages

ANSWER: b

DIFFICULTY: Apply

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Apply

10. A researcher surveys a sample of $n = 20$ college students and asks each person to identify their favorite movie. If the data were organized in a frequency distribution table, what would be included in the last column?

- a. a list of movies
- b. a list of students
- c. a list of frequencies

- d. a list of averages

ANSWER:

c

DIFFICULTY:

Apply

REFERENCES:

2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS:

Bloom's: Apply

11. A set of scores ranges from a high of $X = 63$ to a low of $X = 28$. If these scores were put in a grouped frequency distribution table, what would be the best choice for the interval width?

- a. 2 points
- b. 5 points
- c. 7 points
- d. 10 points

ANSWER:

b

DIFFICULTY:

Analyze

REFERENCES:

2.2 Grouped Frequency Distribution Tables

KEYWORDS:

Bloom's: Analyze

12. A set of scores ranges from a high of $X = 18$ to a low of $X = 5$. If these scores were put in a grouped frequency distribution table with an interval width of 2 points, which of the following would be the top interval in the table?

- a. 4-5
- b. 5-6
- c. 18-19
- d. 17-18

ANSWER:

c

DIFFICULTY:

Apply

REFERENCES:

2.2 Grouped Frequency Distribution Tables

KEYWORDS:

Bloom's: Apply

13. Which of the following is not an appropriate interval width to use when constructing a grouped frequency distribution table.

- a. 5 points
- b. 2 points
- c. 4 points
- d. 10 points

ANSWER:

c

DIFFICULTY:

Understand

REFERENCES:

2.2 Grouped Frequency Distribution Tables

KEYWORDS:

Bloom's: Understand

14. Using the frequency distribution table below, what is the proportion of individuals that scored a 4?

X	f
6	4
5	3
4	7
3	2

2 2
1 2

- a. .2
- b. .7
- c. .35
- d. .1

ANSWER: c
DIFFICULTY: Understand
REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables
KEYWORDS: Bloom's: Understand

15. Which statement below is correct regarding a grouped frequency distribution table?

- a. The $\sum f$ cannot be determined.
- b. The $\sum x$ cannot be determined.
- c. Interval widths should be restricted to either 10 or 20.
- d. The bottom score in each class interval should be divisible by 5.

ANSWER: b
DIFFICULTY: Understand
REFERENCES: 2.2 Grouped Frequency Distribution Tables
KEYWORDS: Bloom's: Understand

16. For the following grouped frequency distribution table of exam scores, how many students had scores higher than $X = 54$?

X	f
60-64	3
55-59	4
50-54	5
45-49	2
40-44	1

- a. 7
- b. 12
- c. 8
- d. 3

ANSWER: a
DIFFICULTY: Understand
REFERENCES: 2.2 Grouped Frequency Distribution Tables
KEYWORDS: Bloom's: Understand

17. For the following grouped frequency distribution table of exam scores, what is the lowest score on the exam?

X	f
90-99	3
80-89	1
70-79	2

60-69	3
50-59	4

- a. $X = 70$
- b. $X = 74$
- c. $X = 90$
- d. Cannot be determined

ANSWER: d

DIFFICULTY: Understand

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

18. For the following grouped frequency distribution table of exam scores, how many students had scores lower than $X = 75$?

X	f
95-99	6
90-94	3
85-89	4
80-84	5
75-79	2
70-74	1

- a. 2
- b. 3
- c. 6
- d. 1

ANSWER: d

DIFFICULTY: Understand

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

19. In a grouped frequency distribution table, one interval is listed as 35-39. If the scores represent a continuous variable, what are the real limits for this interval?

- a. 34.5 and 39.5
- b. 35.5 and 39.5
- c. 34 and 40
- d. 35.25 and 39.25

ANSWER: a

DIFFICULTY: Apply

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Apply

20. For the following grouped frequency distribution table, how many people had scores less than $X = 14$?

X	f
30-34	3

25-29	2
20-24	2
15-19	5
10-14	4
5-9	1

- a. 5
- b. 1
- c. 12
- d. Cannot be determined

ANSWER: d

DIFFICULTY: Understand

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

21. Percentile ranks are closely tied to which of the following terms?

- a. stem and leaf displays
- b. Σf
- c. cumulative percentages
- d. ΣX

ANSWER: c

DIFFICULTY: Understand

REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

22. For the following grouped frequency distribution table, how many people have scores greater than $X = 45$?

X	f
60-69	4
50-59	3
40-49	7
30-39	2

- a. 2
- b. 4
- c. 7
- d. cannot be determined

ANSWER: d

DIFFICULTY: Understand

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

23. For the following grouped frequency distribution table, what is the width of each class interval?

X	f
20-29	2
30-39	5

40-49 4
50-59 1

- a. 9
- b. 10
- c. 5
- d. 2

ANSWER: b

DIFFICULTY: Understand

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

24. If the following grouped frequency distribution table pertaining to a continuous variable were shown in a histogram, the width of the bar above the 15-19 interval would reach from _____ to _____.

X	f
20-24	2
15-19	5
10-14	4
5-9	1

- a. $X = 14.5$ to $X = 19.5$
- b. $X = 15.5$ to $X = 18.5$
- c. $X = 15.5$ to $X = 19.5$
- d. $X = 15.0$ to $X = 19.0$

ANSWER: a

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

25. In a frequency distribution graph, frequencies are presented on the _____ and the scores (categories) are listed on the _____.

- a. X axis; Y axis.
- b. horizontal line; vertical line.
- c. Y axis; X axis.
- d. class interval; axis.

ANSWER: c

DIFFICULTY: Remember

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Remember

26. Which type(s) of frequency distribution graph(s) should be used for data that come from an interval scale of measurement?

- a. histograms or bar graphs
- b. bar graphs

- c. histograms or polygons
- d. histograms, bar graphs, or polygons

ANSWER: c
DIFFICULTY: Understand
REFERENCES: 2.3 Frequency Distribution Graphs
KEYWORDS: Bloom's: Understand

27. Which type(s) of frequency distribution graph(s) should be used for data that come from a nominal scale of measurement?

- a. histograms
- b. bar graphs
- c. histograms or bar graphs
- d. bar graphs or polygons

ANSWER: b
DIFFICULTY: Understand
REFERENCES: 2.3 Frequency Distribution Graphs
KEYWORDS: Bloom's: Understand

28. If a distribution of scores is shown in a bar graph, the scores were measured using a(n) _____ scale of measurement.

- a. nominal or ordinal
- b. ordinal or interval
- c. interval or ratio
- d. nominal or interval

ANSWER: a
DIFFICULTY: Apply
REFERENCES: 2.3 Frequency Distribution Graphs
KEYWORDS: Bloom's: Apply

29. A researcher surveys a sample of $n = 200$ college students and asks each person to identify their favorite movie. Which kind of graph should be used to present these results?

- a. histogram
- b. polygon
- c. pie chart
- d. bar graph

ANSWER: d
DIFFICULTY: Apply
REFERENCES: 2.3 Frequency Distribution Graphs
KEYWORDS: Bloom's: Apply

30. A researcher collects a sample of $n = 20$ Introductory Psychology textbooks and records the number of pages in each book. The results are then placed in a grouped frequency distribution table using intervals of 0-99 pages, 100-199 pages, 200-299 pages, and so on. If the results were converted into a frequency distribution graph, which kind of graph(s) would be appropriate?

- a. a bar graph

- b. a histogram or bar graph
- c. a histogram
- d. a histogram or polygon

ANSWER: d

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

31. A biologist records the number and types of fish caught in a local lake during a 2- year period. The biologist reports that 7% of the fish caught during this period were trout, whereas 43% of the fish caught were bass. These reports of the number of trout and bass at this lake are examples of _____.

- a. cumulative frequencies.
- b. percentile ranks.
- c. relative frequencies.
- d. smooth curves.

ANSWER: c

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

32. After recording the final grade (A, B, C, D, F) for each individual in a class of $N = 26$ students, the professor would like to display the grade distribution in a frequency distribution graph. Which kind of graph should be used?

- a. bar graph
- b. histogram
- c. polygon
- d. pie chart

ANSWER: a

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

33. What is the percentile rank for a score of 4 in the frequency distribution table below?

X	f
6	4
5	5
4	1
3	3
2	6
1	1

- a. 45th
- b. 60th
- c. 50th
- d. 55th

ANSWER: d

DIFFICULTY: Understand
REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables
KEYWORDS: Bloom's: Understand

34. If a set of scores for a variable is displayed in a frequency distribution polygon, which scale of measurement was used to measure the variable?

- a. nominal or ordinal
- b. ordinal or interval
- c. ratio or ordinal
- d. interval or ratio

ANSWER: d
DIFFICULTY: Understand

REFERENCES: 2.3 Frequency Distribution Graphs
KEYWORDS: Bloom's: Understand

35. A frequency distribution graph represents frequencies associated with scores for a variable with vertical bars that have space between them. Which scale of measurement was used to measure this variable?

- a. nominal
- b. ordinal
- c. interval
- d. ratio

ANSWER: a
DIFFICULTY: Understand

REFERENCES: 2.3 Frequency Distribution Graphs
KEYWORDS: Bloom's: Understand

36. If a set of scores is displayed using a smooth curve, which scale of measurement was used to measure the scores?

- a. nominal
- b. interval
- c. nominal or ordinal
- d. interval or ratio

ANSWER: d
DIFFICULTY: Understand

REFERENCES: 2.3 Frequency Distribution Graphs
KEYWORDS: Bloom's: Understand

37. For the scores shown in the following stem and leaf display, what is the highest score in the distribution?

<u>Stem and Leaf Display</u>	
4	159
3	098
2	89103
1	39

a. 43

- b. 49
- c. 13
- d. 159

ANSWER:

b

DIFFICULTY:

Understand

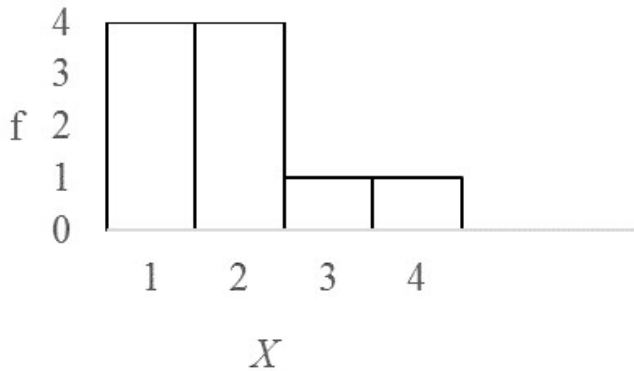
REFERENCES:

2.4 Stem and Leaf Displays

KEYWORDS:

Bloom's: Understand

38. How many individual scores are in the following distribution?



- a. $N = 5$
- b. $N = 6$
- c. $N = 10$
- d. $N = 4$

ANSWER:

c

DIFFICULTY:

Understand

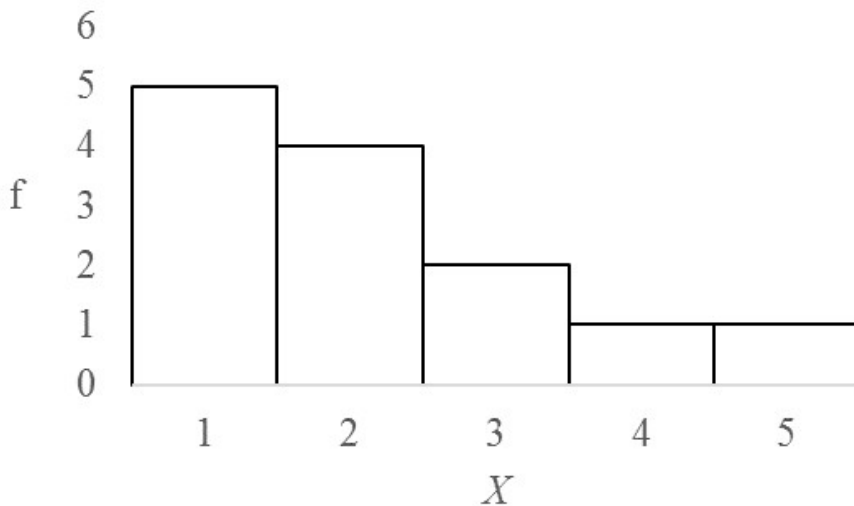
REFERENCES:

2.3 Frequency Distribution Graphs

KEYWORDS:

Bloom's: Understand

39. For the following distribution of quiz scores, what is ΣX ?



- a. 28
- b. 15
- c. 23
- d. 10

ANSWER:

a

DIFFICULTY:

Understand

REFERENCES:

2.3 Frequency Distribution Graphs

KEYWORDS:

Bloom's: Understand

40. The normal distribution is an example of a _____.

- a. histogram showing data from a sample.
- b. polygon showing data from a sample.
- c. bar graph showing data from a population.
- d. smooth curve showing data from a population.

ANSWER:

d

DIFFICULTY:

Remember

REFERENCES:

2.3 Frequency Distribution Graphs

KEYWORDS:

Bloom's: Remember

41. Consider the distribution of exam scores for the first exam within a college course. If the set of exam scores forms a symmetrical distribution, what can be concluded about the students' scores?

- a. Most of the students had relatively high scores.
- b. Most of the students had relatively low scores.
- c. About an equal number of students had relatively high and relatively low scores.
- d. A substantial number of students had very high scores and a substantial number of students had very low scores.

ANSWER:

c

DIFFICULTY:

Apply

REFERENCES:

2.3 Frequency Distribution Graphs

KEYWORDS:

Bloom's: Apply

42. If a set of exam scores forms a negatively skewed distribution, what can you likely conclude about the students' scores?

- a. Most of the students had relatively high scores.
- b. Most of the students had relatively low scores.
- c. About an equal number of students had relatively high and relatively low scores.
- d. It is not possible to draw any conclusions about students' scores with this information.

ANSWER:

a

DIFFICULTY:

Apply

REFERENCES:

2.3 Frequency Distribution Graphs

KEYWORDS:

Bloom's: Apply

43. Which term is used to describe the shape of a frequency distribution graph in which most scores pile up on the left-hand side of the graph and taper off to the right?

- a. symmetrical
- b. positively skewed
- c. negatively skewed
- d. normal

ANSWER: b

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

44. Which of the following statements pertaining to skewed and normal distributions is correct?

- a. A skewed distribution tends to have lower scores, and a normal distribution tends to have higher scores.
- b. A skewed distribution tends to have higher scores, and a normal distribution tends to have lower scores.
- c. A skewed distribution tends to have two tails, and a normal distribution tends to have one tail.
- d. A skewed distribution tends to have one tail, and a normal distribution tends to have two tails.

ANSWER: d

DIFFICULTY: Remember

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Remember

45. The students in a psychology class seem to think that the midterm exam was very difficult. If they are correct, what is the most likely shape for the distribution of exam scores?

- a. symmetrical
- b. positively skewed
- c. negatively skewed
- d. normal

ANSWER: b

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

46. In a frequency distribution graph with negative skew, scores with the highest frequencies are _____ of the distribution.

- a. on the right side
- b. on the left side
- c. in the middle
- d. represented at two distinct peaks

ANSWER: a

DIFFICULTY: Understand

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Understand

47. What is the shape of the distribution for the following set of data? Scores: 1, 1, 1, 1, 1, 2, 2, 2, 3, 3, 4, 5

- a. symmetrical

- b. positively skewed
- c. negatively skewed
- d. normal

ANSWER: b

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

48. What is the shape of the frequency distribution for the following set of data?

X	f
5	5
4	4
3	2
2	2
1	1

- a. symmetrical
- b. positively skewed
- c. negatively skewed
- d. normal

ANSWER: c

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

49. What is the shape of the frequency distribution for the following set of data regarding students' scores on a 10-item quiz?

X	f
9	1
8	1
7	3
6	6
5	6

- a. symmetrical
- b. positively skewed
- c. negatively skewed
- d. normal

ANSWER: b

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

50. Compared to a grouped frequency distribution table, a stem and leaf plot offers the advantage of being able to identify every individual score from a data set.

- a. True
- b. False

ANSWER: True
 DIFFICULTY: Understand
 REFERENCES: 2.4 Stem and Leaf Displays
 KEYWORDS: Bloom's: Understand

51. A group of quiz scores ranges from 3 to 10, but no student had a score of $X = 7$. If the scores are put in a frequency distribution table, $X = 7$ would not be listed in the X column.

- a. True
- b. False

ANSWER: False
 DIFFICULTY: Apply
 REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables
 KEYWORDS: Bloom's: Apply

52. It is customary to list the score categories in a frequency distribution table from the highest down to the lowest.

- a. True
- b. False

ANSWER: True
 DIFFICULTY: Remember
 REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables
 KEYWORDS: Bloom's: Remember

53. For the distribution shown in the table below, 60% of scores are less than $X = 3$.

X	f
5	2
4	5
3	3
2	8
1	7

- a. True
- b. False

ANSWER: True
 DIFFICULTY: Understand
 REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables
 KEYWORDS: Bloom's: Understand

54. For the following frequency distribution of quiz scores, 10% of students have scores of $X = 2$.

X	f
5	4
4	4
3	6
2	4
1	2

- a. True
- b. False

ANSWER: False
DIFFICULTY: Understand
REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables
KEYWORDS: Bloom's: Understand

55. For the following distribution of scores, 80% of individuals scored either a 2 or greater than 2.

X	f
5	4
4	3
3	6
2	3
1	4

- a. True
- b. False

ANSWER: True
DIFFICULTY: Understand
REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables
KEYWORDS: Bloom's: Understand

56. For the following distribution of scores that come from a continuous variable, the upper real limit for the interval that includes $X = 2$ is 2.

X	f
5	3
4	2
3	5
2	1
1	3

- a. True
- b. False

ANSWER: False
DIFFICULTY: Understand
REFERENCES: 2.1 Frequency Distributions and Frequency Distribution Tables
KEYWORDS: Bloom's: Understand

57. A grouped frequency distribution table lists one interval as 15-20. The width of this interval is 5 points.

- a. True
- b. False

ANSWER: False
DIFFICULTY: Understand
REFERENCES: 2.2 Grouped Frequency Distribution Tables
KEYWORDS: Bloom's: Understand

58. Consider the following scores: 15, 33, 41, 29, 18, 47, 21, 26. The stem and leaf display below accurately represents these scores.

Stem and Leaf Display

1	58
2	916
3	3
4	17

- a. True
- b. False

ANSWER: True
DIFFICULTY: Apply
REFERENCES: 2.4 Stem and Leaf Displays
KEYWORDS: Bloom's: Apply

59. In a grouped frequency distribution table, scores range from $X = 15$ to $X = 52$ with class interval widths of 5. The bottom class interval should be 15-19..

- a. True
- b. False

ANSWER: True
DIFFICULTY: Apply
REFERENCES: 2.2 Grouped Frequency Distribution Tables
KEYWORDS: Bloom's: Apply

60. If a set of scores covers a range of 70 points, then the grouped frequency table for the scores should use an interval width of 7 points.

- a. True
- b. False

ANSWER: False
DIFFICULTY: Apply
REFERENCES: 2.2 Grouped Frequency Distribution Tables
KEYWORDS: Bloom's: Apply

61. A set of scores ranges from $X = 13$ to $X = 73$. If the scores were put in a grouped frequency distribution table with an interval width of 10 points, the top interval would be 73-82.

- a. True
- b. False

ANSWER: False
DIFFICULTY: Apply
REFERENCES: 2.2 Grouped Frequency Distribution Tables
KEYWORDS: Bloom's: Apply

62. In a grouped frequency distribution table, the bottom value in each class interval should be a multiple of the interval width.

- a. True
- b. False

ANSWER: True
DIFFICULTY: Understand
REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

63. A set of quiz scores ranges from a low of $X = 58$ to a high of $X = 93$. If the scores are place in a grouped frequency distribution table with an interval width of 5 points, the bottom interval should be 55-60.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Apply

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Apply

64. Consider that a sample of individuals each report how many siblings they have, and this data is then put into a grouped frequency distribution table. This grouped frequency distribution table will not provide enough information to obtain a complete listing of the original responses of individuals.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Apply

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Apply

65. This grouped frequency distribution appropriately adheres to the guidelines pertaining to creating grouped frequency distribution tables.

X	f
25-29	1
20-24	6
15-19	5
10-14	8
5-9	3
0-4	2

- a. True
- b. False

ANSWER: True

DIFFICULTY: Apply

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Apply

66. In general, more information is lost in a grouped frequency distribution table that has class intervals with a width of 10 than a grouped frequency distribution table that has class intervals with a width of 5.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Understand

REFERENCES: 2.2 Grouped Frequency Distribution Tables

KEYWORDS: Bloom's: Understand

67. A professor records the number of students who are absent each day for the semester. Given the scale of measurement used when measuring this variable, a bar graph should be used to show the frequency distribution.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

68. Smooth curves and relative frequencies are more often used to describe population than sample data.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Understand

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Understand

69. A sports historian records the number of times that the Minnesota Twins finished 1st, 2nd, 3rd, 4th, or 5th in their division for each of the last 20 years. If the results are presented in a frequency distribution graph, then a histogram should be used.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

70. No space is left between adjacent bars in a histogram.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Remember

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Remember

71. A set of scores ranging from a high of 41 to a low of 5 is organized into a grouped frequency distribution table using an interval width of 5 points. If the distribution is shown in a graph, then a bar graph should be used.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

72. The classrooms in a Psychology department are numbered from 200 to 210. The department chair records the number of classes held in each room during the spring semester. If the results needed to be presented in a frequency distribution graph, the professor should use a bar graph.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

73. Consider the following scores pertaining to a data set: 12, 30, 40, 25. To complete a stem and leaf display, leaves of 2, 0, 0, and 5 should be created.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Apply

REFERENCES: 2.4 Stem and Leaf Displays

KEYWORDS: Bloom's: Apply

74. A bar graph is constructed so that adjacent bars touch.

- a. True
- b. False

ANSWER: False

DIFFICULTY: Remember

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Remember

75. A distribution of scores on a driver's license test forms is normally shaped. This is an example of a symmetrical distribution.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

76. In August in Florida, the daily high temperatures are typically high with only a few relatively cool days. A frequency distribution graph showing daily average temperatures in Florida for August would probably form a negatively skewed distribution.

- a. True
- b. False

ANSWER: True

DIFFICULTY: Apply

REFERENCES: 2.3 Frequency Distribution Graphs

KEYWORDS: Bloom's: Apply

77. Consider the following scores pertaining to a data set: 22, 31, 43, 19. To complete a stem and leaf display, stems of 2, 1, 3, and 9 should be created.

- a. True
- b. False

ANSWER:

False

DIFFICULTY:

Apply

REFERENCES:

2.4 Stem and Leaf Displays

KEYWORDS:

Bloom's: Apply

78. Consider the following scores: 10, 19, 21, 28, 26, 22, 30, 15, 18, 20. The stem and leaf display below accurately depicts this data.

Stem and leaf display

1	0958
2	08620
3	1

- a. True
- b. False

ANSWER:

False

DIFFICULTY:

Apply

REFERENCES:

2.4 Stem and Leaf Displays

KEYWORDS:

Bloom's: Apply

79. In a negatively skewed distribution, scores either pile up on the left side of the distribution or pile up on the right side of the distribution.

- a. True
- b. False

ANSWER:

False

DIFFICULTY:

Understand

REFERENCES:

2.3 Frequency Distribution Graphs

KEYWORDS:

Bloom's: Understand

80. For the scores shown in the following stem and leaf display, how many individuals had scores in the 20s?

Stem and Leaf Display

4	674
3	09817
2	891652
1	39

- a.
- b.
- c.
- d.

ANSWER:

b

DIFFICULTY:

Understand

2.4 Stem and Leaf Displays

Bloom's: Understand

- 40-45
- 40-44
- 10-15
- 10-14

d

Apply

2.2 Grouped Frequency Distribution Tables

Bloom's: Apply

a.	N	X	f
b.	ΣX	5	3
c.	ΣX^2	4	4
		3	2
		2	1
		1	3

- $N = 13$
- $\Sigma X = 42$
- $\Sigma X^2 = 164$

Understand

2.1 Frequency Distributions and Frequency Distribution Tables

Bloom's: Understand

ANSWER: Data measured using either a nominal or ordinal scale of measurement should be graphically represented using a bar graph. Data measured using either an interval or ratio scale of measurement should be graphically represented using either a histogram or polygon.

Understand

2.3 Frequency Distribution Graphs

Bloom's: Understand

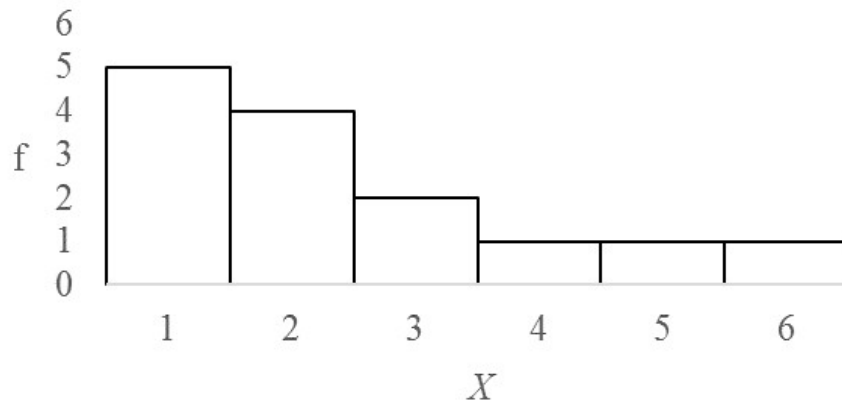
- Construct a frequency distribution table.
- Sketch a histogram of the frequency distribution.
1, 2, 3, 1, 1, 4, 2
1, 5, 6, 2, 2, 1, 3

a.

X	f
6	1
5	1
4	1
3	2

2 4
1 5

b.



DIFFICULTY: Apply
REFERENCES: 2.3 Frequency Distribution Graphs
KEYWORDS: Bloom's: Apply

85. For the following scores, construct a grouped frequency distribution table using an appropriate width. Based on the table, what is the shape of the distribution?

62, 73, 91, 92, 90, 94, 87, 81, 68, 80, 92, 85

63, 92, 94, 78, 84, 90, 80, 74, 82, 92, 93, 73

ANSWER:

$\bar{X}$	f
60-64	2
65-69	1
70-74	3
75-79	1
80-84	5
85-89	2
90-94	10

Negatively skewed

DIFFICULTY: Apply
REFERENCES: 2.2 Grouped Frequency Distribution Tables
KEYWORDS: Bloom's: Apply