

1. Award: 7.00 points

Exercise 2-37

A chain of sport shops catering to beginning skiers, headquartered in Aspen, Colorado, plans to conduct a study of how much a beginning skier spends on his or her initial purchase of equipment and supplies. Based on these figures, it wants to explore the possibility of offering combinations, such as a pair of boots and a pair of skis, to induce customers to buy more. A sample of cash register receipts revealed these initial purchases:

\$140	\$83	\$139	\$161	\$175	\$83	\$129	\$149	\$141
130	264	231	132	172	149	170	214	105
220	126	90	171	162	229	121	117	149
125	130	118	172	156	214	87	172	230
162	195	128	126	142	118	127	130	

(a) Find the smallest class interval. Use five classes. (Round your answer to 1 decimal place. Omit the "\$" sign in your response.)

\$

(b) What would be a better class interval? (Omit the "\$" sign in your response.)

\$

(c) Organize the data into a frequency distribution using a lower limit of \$80. (Omit the "\$" sign in your response.)

\$	\$ 80	up to	120
\$		up to	
\$		up to	
\$		up to	
\$		up to	

References

Worksheet

Difficulty: Medium

Exercise 2-37

Learning Objective: 02-04 Create a frequency distribution for a data set.

Exercise 2-50

[The following information applies to the questions displayed below.]

The number of families who used the Minneapolis YWCA day care service was recorded over a 30-day period. The results are as follows:

62	51	60	43	58	56	53	35	55	55
35	53	65	35	6	22	55	26	32	24
53	17	11	58	54	54	20	56	39	57

References

Section Break

Exercise 2-50

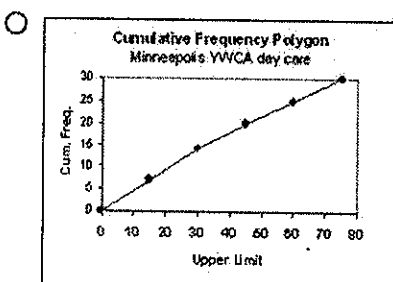
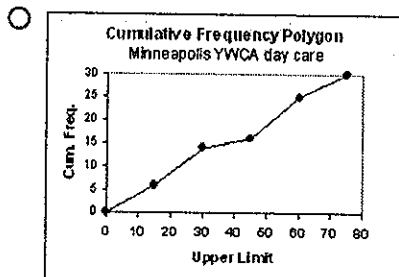
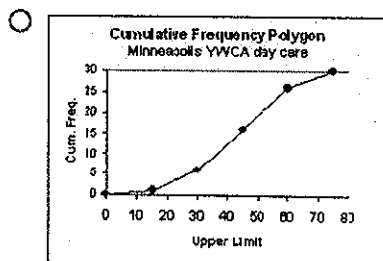
2. Award: 3.75 points

Exercise 2-50 Part a

(a) Construct a cumulative frequency distribution of this data.

Class	Cumulative Frequency
0 up to 15	
up to	

(b) Select a graph of the cumulative frequency polygon of the given data.



References

Multiple Choice

Difficulty: Medium

Exercise 2-50 Part b

Learning Objective: 02-07 Construct and interpret a cumulative frequency distribution.

4.

Award: 3.75 points

Exercise 2-50 Part c

(c) How many days saw fewer than 30 families utilize the day care center?

Number of days

References

Worksheet

Difficulty: Medium

Exercise 2-50 Part c

Learning Objective: 02-07 Construct and interpret a cumulative frequency distribution.

5.

Award: 3.75 points

Exercise 2-50 Part d

(d) The highest 60 percent of the days had at least families.

References

Worksheet

Difficulty: Medium

References

Worksheet

Difficulty: Easy

Exercise 3-32

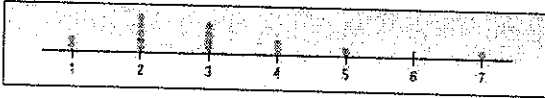
Learning Objective: 03-06 Calculate the geometric mean.

7.

Award: 7.00 points

Exercise 4-3

Consider the following chart.



(a) What is this chart called?

(Click to select) ▼

(b) How many observations are in the study?

(c) What are the maximum and the minimum values?

Maximum Minimum

(d) Around what values do the observations tend to cluster?

 and

References

Worksheet

Difficulty: Easy

Exercise 4-3

Learning Objective: 04-01 Construct and interpret a dot plot.

8.

Award: 7.00 points

Exercise 4-5

The first row of a stem-and-leaf chart appears as follows: 62 | 1 3 3 7 9. Assume whole number values. (The stem represents the ten's position and the leaf represents the one's position.)

(a) What is the "possible range" of the values in this row?

Possible range to

(b) How many data values are in this row?

Number of data values

(c) Select the actual values in this row of data.

(Click to select) ▼

Feb 02 07 2012

References

Worksheet

Difficulty: Easy

Exercise 4-5

Learning Objective: 04-02 Construct and describe a stem-and-leaf display.

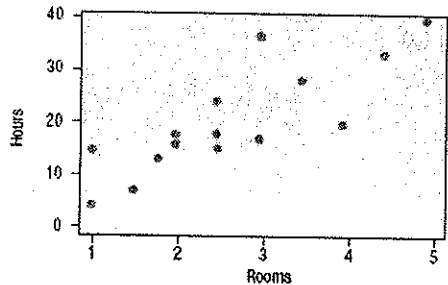
Exercise 4-17

Learning Objective: 04-04 Construct and analyze a box plot.

10. Award: 7.00 points

Exercise 4-24

Silver Springs Moving and Storage, Inc., is studying the relationship between the number of rooms in a move and the number of labor hours required for the move. As part of the analysis the CFO of Silver Springs developed the following scatter diagram.



(a) How many moves are in the sample?

(b) Choose the correct answer.

(Click to select) ▼

References

Worksheet

Difficulty: Medium

Exercise 4-24

Learning Objective: 04-06 Create and interpret a scatter diagram.

11. Award: 7.00 points

Exercise 4-26

Ski Resorts of Vermont, Inc., is considering a merger with Gulf Shores Beach Resorts, Inc., of Alabama. The board of directors surveyed 50 stockholders concerning their position on the merger. The results are reported below.

Number of shares held	Opinion			Total
	Favor	Opposed	Undecided	
Under 200	8	6	2	16
200 up to 1,000	6	8	1	15
Over 1,000	6	12	1	19
Total	20	26	4	50

(a) What level of measurement is used in this table?

Opinion is (Click to select) ▼ and number of shares is (Click to select) ▼

(b) What is this table called?

(Click to select) ▼

(c) What group seems most strongly opposed to the merger?

(Click to select) ▼

References

Worksheet

Difficulty: Medium

Exercise 4-26

Learning Objective: 04-07 Develop and explain a contingency table.

Mode
11/17/2017 10:17:11 AM

References

Worksheet	Difficulty: Medium	Learning Objective: 03-04 Determine the median.
Exercise 3-25	Learning Objective: 03-02 Identify and compute the arithmetic mean.	Learning Objective: 03-05 Identify the mode.

13. Award: 7.00 points

Exercise 1-1

What is the level of measurement for each of the following variables?

- a. Student IQ ratings.
- b. Distance students travel to class.
- c. The jersey numbers of a sorority soccer team.
- d. A classification of students by state of birth.
- e. A ranking of students as freshman, sophomore, junior, and senior.
- f. Number of hours students study per week.

(Click to select) ▼

(Click to select) ▼

(Click to select) ▼

(Click to select) ▼

(Click to select) ▼

(Click to select) ▼

rev. 01_01_2012

Hints

Hint #1

References

Worksheet	Difficulty: Easy
Exercise 1-1	Learning Objective: 01-06 Recognize the levels of measurement in data.

14. Award: 3.75 points

MC Qu. 41 What type of variable is the number of gallo...

What type of variable is the number of gallons of gasoline pumped by a filling station during a day?

- ☐ Qualitative
- ☐ Continuous
- ☐ Attribute
- ☐ Discrete

References

Multiple Choice	Difficulty: Medium
MC Qu. 41 What type of variable is the number of gallo...	Learning Objective: 01-05 Compare the differences between discrete and continuous variables.

15. Award: 3.75 points

MC Qu. 43 What type of variable is the number of robbe...

Exercise 2-17

The following frequency distribution reports the number of frequent flier miles, reported in thousands, for employees of Brumley Statistical Consulting, Inc., during the first quarter of 2007.

Frequent Flier Miles (000)	Number of Employees
0 up to 4	6
4 up to 8	12
8 up to 12	23
12 up to 16	9
16 up to 20	3
Total	53

- (a) How many employees were studied?
- (b) What is the midpoint of the first class? (Round your answer to 1 decimal place.)
- (d) A frequency polygon is to be drawn. What are the coordinates of the plot for the last class?

$x =$ $y =$

References

Worksheet

Difficulty: Medium

Exercise 2-17

Learning Objective: 02-06 Present data from a frequency distribution in a histogram or frequency polygon.

17.

Award: 3.75 points

MC Qu. 19 When data is collected using a qualitative, ...

When data is collected using a qualitative, nominal variable, what is true about a frequency distribution that summarizes the data?

- ☐ Upper and lower class limits must be calculated.
- ☐ A pie chart can be used to summarize the data.
- ☐ Number of classes is equal to the number of variable's values plus 2.
- ☐ The "5 to the k rule" can be applied.

References

Multiple Choice

Difficulty: Medium

MC Qu. 19 When data is collected using a qualitative, ...

Learning Objective: 02-03 Present a set of data in a pie chart.

18.

Award: 7.00 points

Exercise 3-40

A sample of the personnel files of eight employees at the Pawnee location of Acme Carpet Cleaners, Inc., revealed that during the last six-month period they lost the following number of days due to illness:

2	0	6	3	10	4	1	2
---	---	---	---	----	---	---	---

A sample of eight employees during the same period at the Chickpee location of Acme Carpets revealed they lost the following number of days due to illness.

2	0	1	0	5	0	1	0
---	---	---	---	---	---	---	---

 [Click here for the Excel Data File](#)

- (a) Calculate the range, mean and mean deviations for the Pawnee location and the Chickpee location. (Round mean and mean deviation to 2 decimal places.)