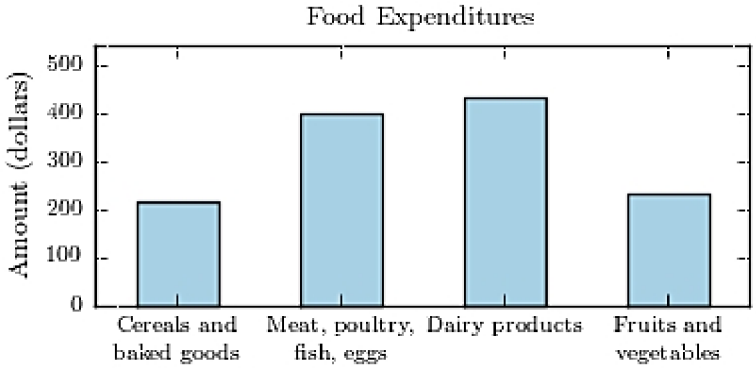
Elementary Statistics 2nd edition Navidi Test Bank

SKU: 9781259345296-TEST-BANK

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

1) The following bar graph presents the average amount a certain family spent, in dollars, on various food categories in a recent year. 1) _____

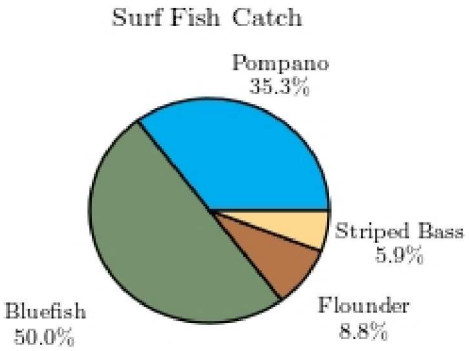
On which food category was the most money spent?



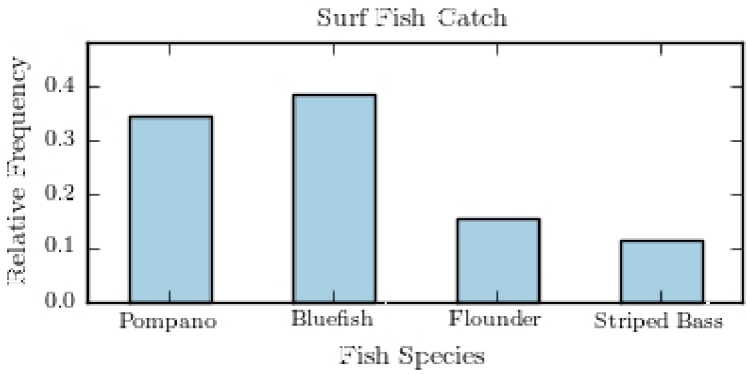
A) Fruits and vegetables
B) Cereals and baked goods
C) Dairy products
D) Meat poultry, fish, eggs

2) The following pie chart presents the percentages of fish caught in each of four ratings categories. 2) _____

Match this pie chart with its corresponding bar graph.

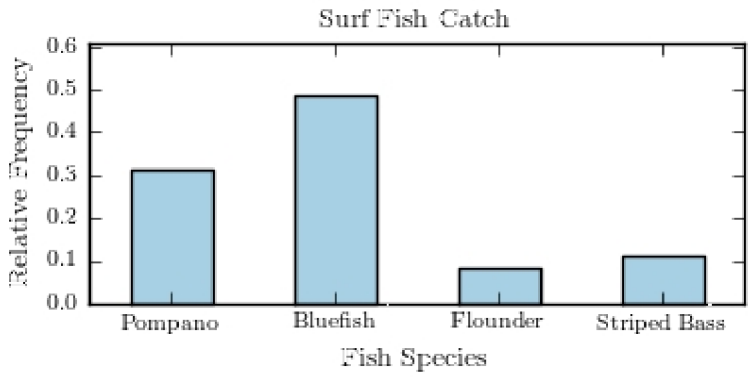


A)

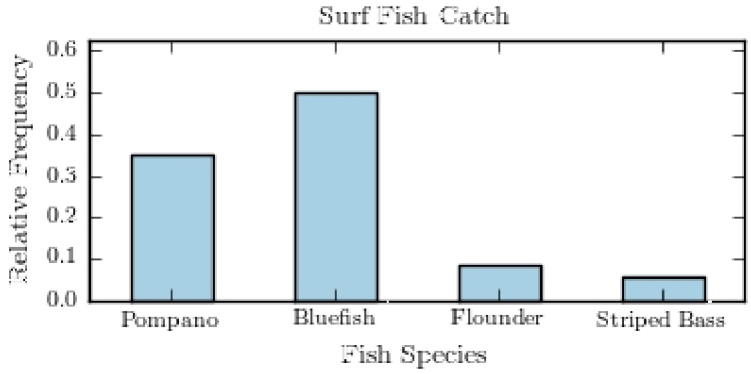


Elementary Statistics 2nd edition Navidi Test Bank

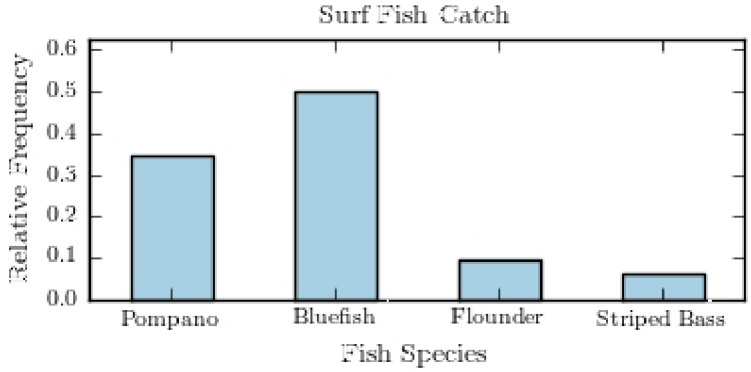
B)



C)



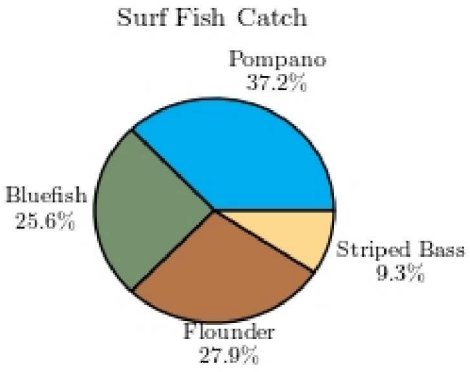
D)



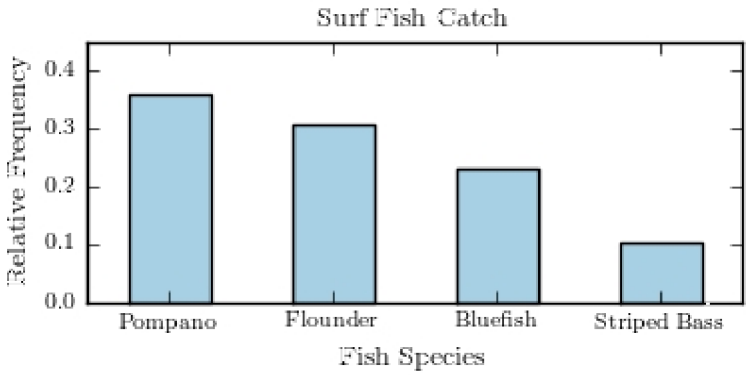
3) The following pie chart presents the percentages of fish caught in each of four ratings categories. 3) _____

Match this pie chart with its corresponding Parato chart.

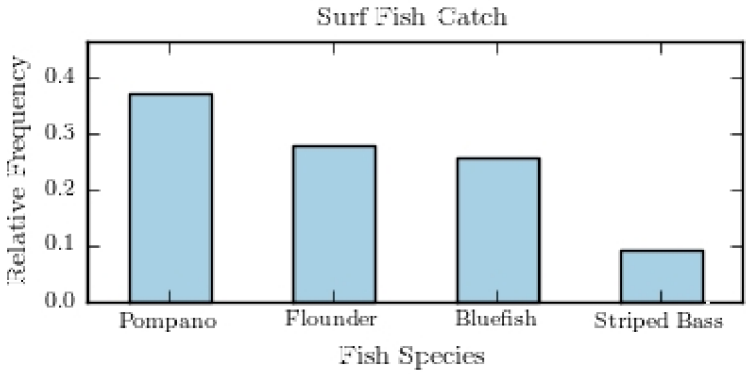
Elementary Statistics 2nd edition Navidi Test Bank



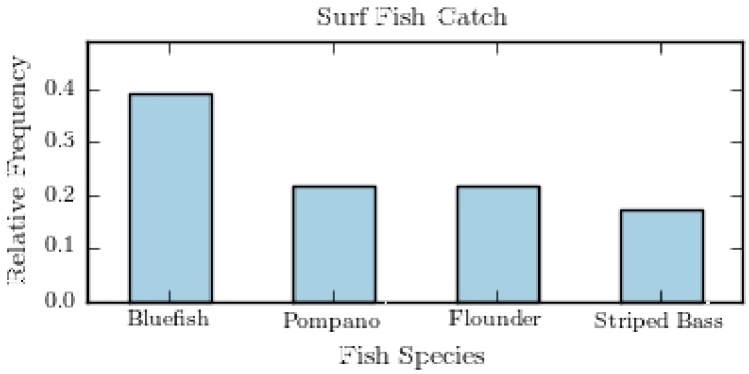
A)



B)

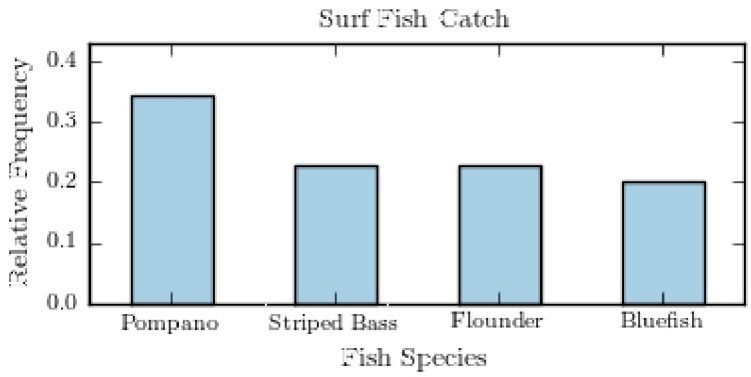


C)

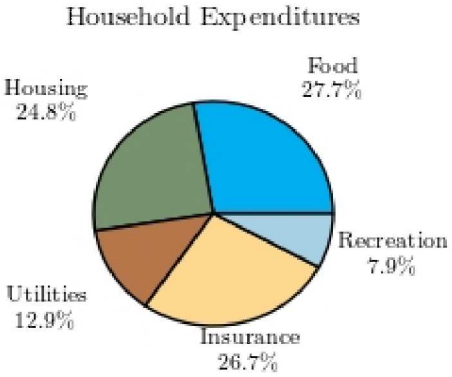


Elementary Statistics 2nd edition Navidi Test Bank

D)



4) Following is a pie chart that presents the percentages spent by a certain household on its five largest annual expenditures. What percentage of the money spent was spent on food, housing, and utilities? 4) _____



A) 47% B) 65.4% C) 60.4% D) 52.5%

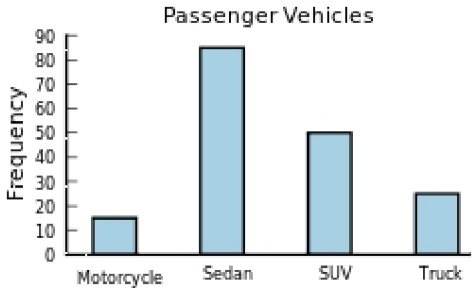
5) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day. 5) _____

Vehicle Type	Frequency
Motorcycle	15
Sedan	85
SUV	50
Truck	25

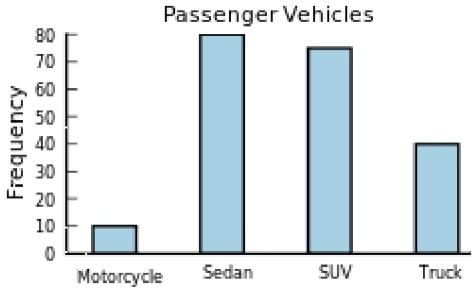
Construct a frequency bar graph for the data.

Elementary Statistics 2nd edition Navidi Test Bank

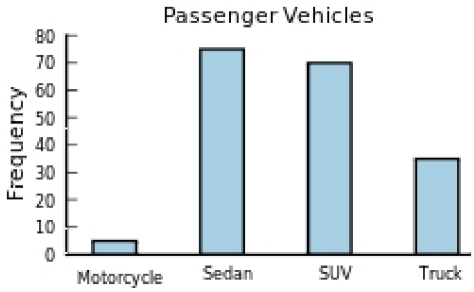
A)



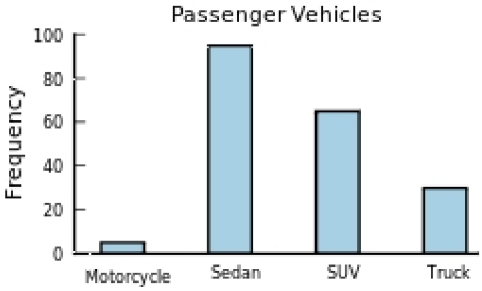
B)



C)



D)



Elementary Statistics 2nd edition Navidi Test Bank

6) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day. 6) _____

Vehicle Type	Frequency
Motorcycle	7
Sedan	79
SUV	78
Truck	45

What is the relative frequency of the SUV category?

A) 78% B) 0.373 C) 0.987 D) 78

7) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day. 7) _____

Vehicle Type	Frequency
Motorcycle	13
Sedan	78
SUV	88
Truck	35

Construct a relative frequency distribution for the data.

A)

Vehicle Type	Relative Frequency
Motorcycle	0.061%
Sedan	0.364%
SUV	0.411%
Truck	0.164%

B)

Vehicle Type	Relative Frequency
Motorcycle	0.061
Sedan	0.364
SUV	0.411
Truck	0.164

C)

Vehicle Type	Relative Frequency
Motorcycle	0.13
Sedan	0.78
SUV	0.88
Truck	0.35

Elementary Statistics 2nd edition Navidi Test Bank

D)

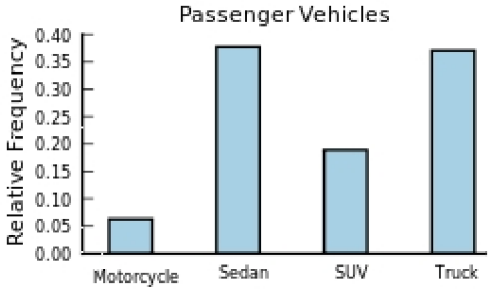
Vehicle Type	Relative Frequency
Motorcycle	0.148
Sedan	0.886
SUV	1
Truck	0.398

8) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day. 8) _____

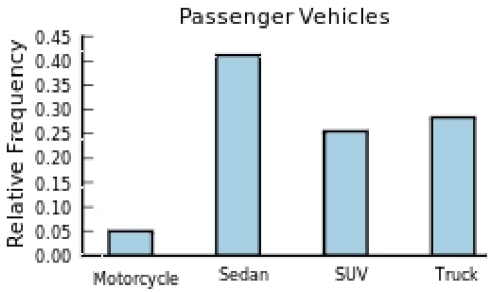
Vehicle Type	Frequency
Motorcycle	7
Sedan	58
SUV	36
Truck	40

Construct a relative frequency bar graph for the data.

A)

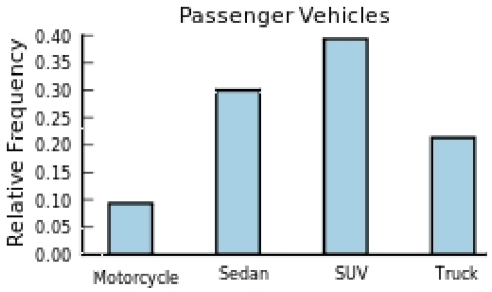


B)

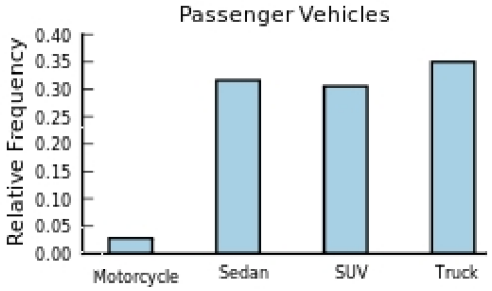


Elementary Statistics 2nd edition Navidi Test Bank

C)



D)

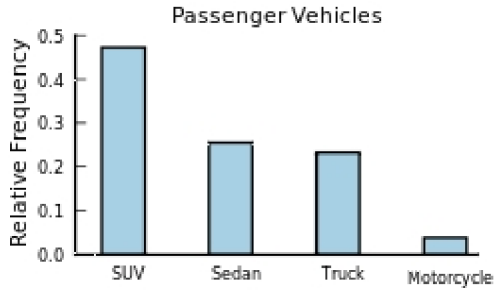


9) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day. 9) _____

Vehicle Type	Frequency
Motorcycle	5
Sedan	33
SUV	61
Truck	30

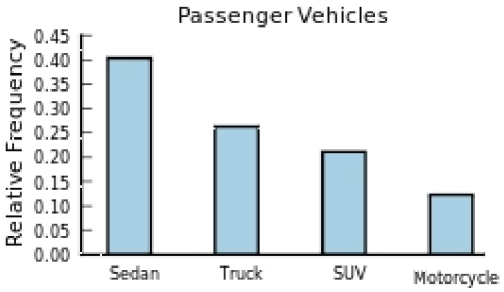
Construct a relative frequency Parato chart for the data.

A)

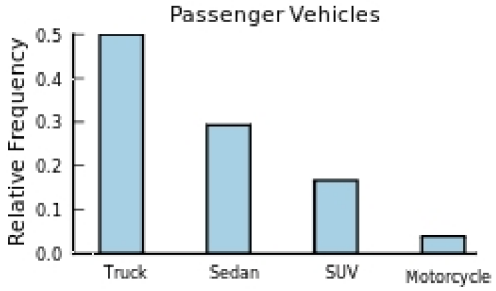


Elementary Statistics 2nd edition Navidi Test Bank

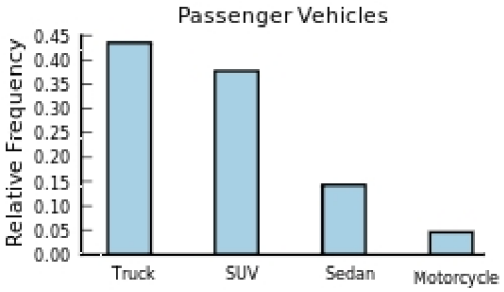
B)



C)



D)



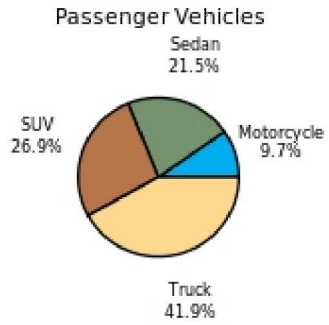
Elementary Statistics 2nd edition Navidi Test Bank

10) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day. 10) _____

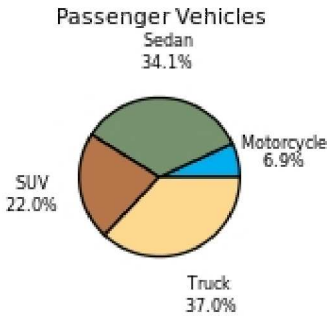
Vehicle Type	Frequency
Motorcycle	6
Sedan	26
SUV	30
Truck	21

Construct a pie chart for the data.

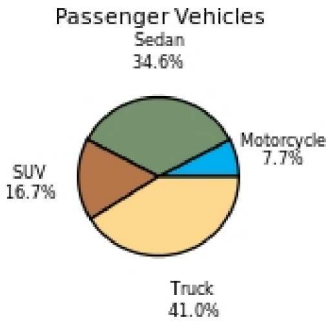
A)



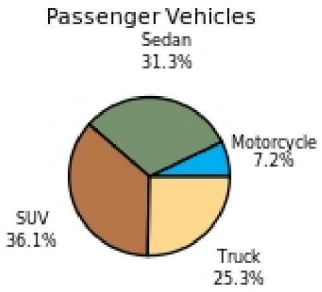
B)



C)

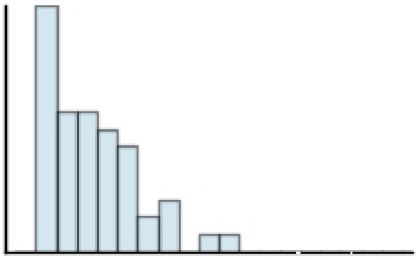


D)



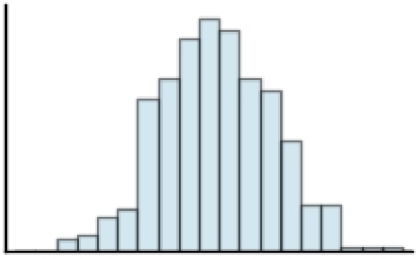
Elementary Statistics 2nd edition Navidi Test Bank

11) Classify the histogram as skewed to the left, skewed to the right, or approximately symmetric. 11) _____



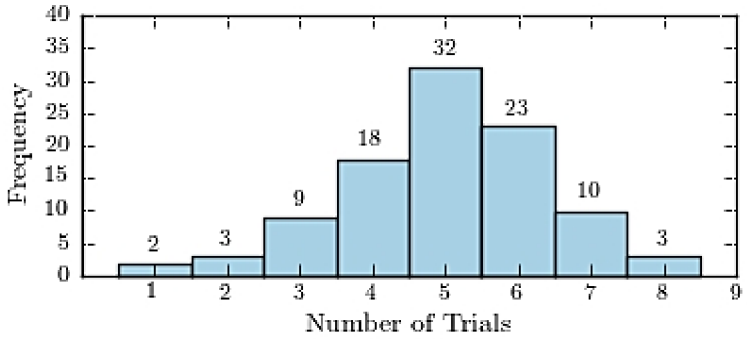
A) approximately symmetric
B) skewed to the left
C) skewed to the right

12) Classify the histogram as unimodal or bimodal. 12) _____



A) unimodal B) bimodal

13) One hundred students are shown an eight-digit number on a piece of cardboard for three seconds and are asked to then recite the number from memory. The process is repeated until the student accurately recites the entire number from memory. The following histogram presents the number of trials it took each student to memorize the number. 13) _____



How many students memorized the number in three trials or less?
A) 14 B) 5 C) 16 D) 86

Elementary Statistics 2nd edition Navidi Test Bank

14) The following frequency distribution presents the weights in pounds (lb) of a sample of visitors to a health clinic. 14) _____

Weight (lb)	Frequency
130-137	3
138-145	2
146-153	8
154-161	3
162-169	5
170-177	9
178-185	5
186-193	2

What is the class width?

A) 7 B) 8 C) 64 D) 9

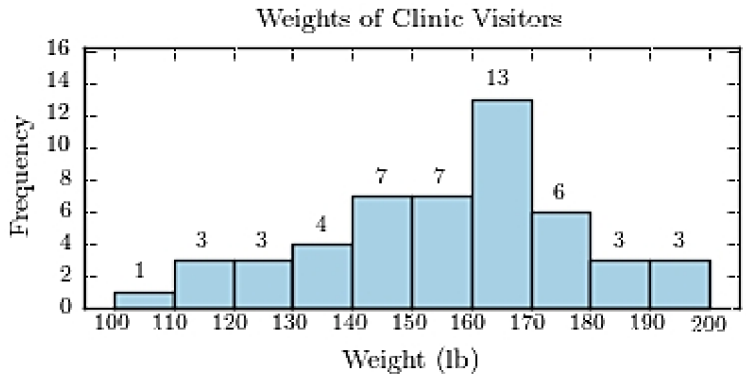
15) The following frequency distribution presents the weights in pounds (lb) of a sample of visitors to a health clinic. 15) _____

Weights of Clinic Visitors

Weight (lb)	Frequency
100–109	1
110–119	3
120–129	3
130–139	4
140–149	7
150–159	7
160–169	13
170–179	6
180–189	3
190–199	3

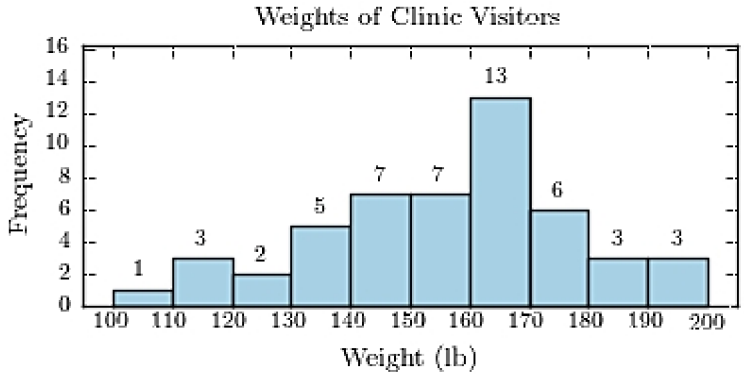
Construct a frequency histogram.

A)

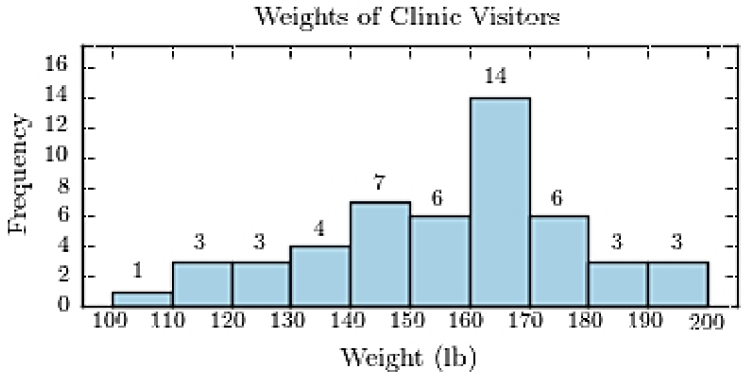


Elementary Statistics 2nd edition Navidi Test Bank

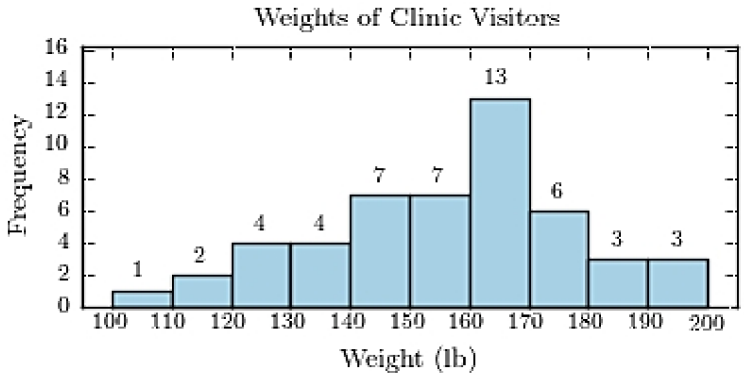
B)



C)



D)



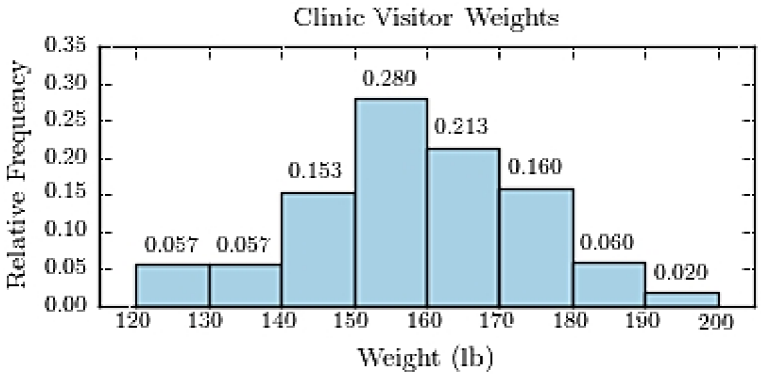
Elementary Statistics 2nd edition Navidi Test Bank

16) The following frequency distribution presents the weights in pounds (lb) of a sample of visitors to a health clinic. 16) _____

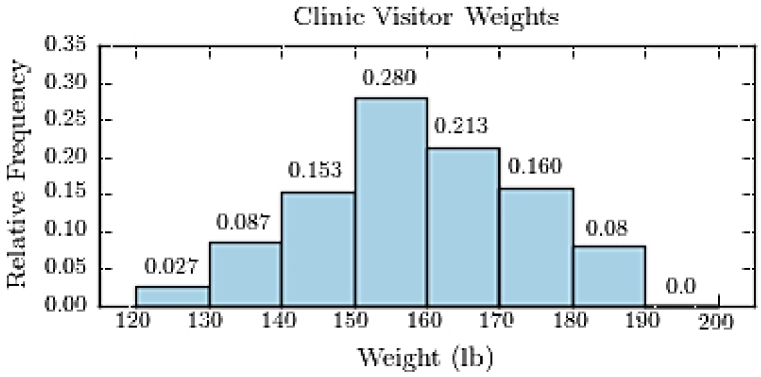
Clinic Visitor Weights	
Weight (lb)	Frequency
120-129	4
130-139	13
140-149	23
150-159	42
160-169	32
170-179	24
180-189	9
190-199	3

Construct a relative frequency histogram.

A)

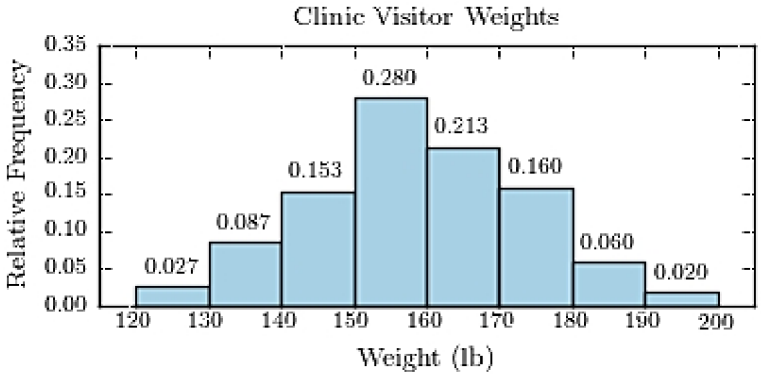


B)

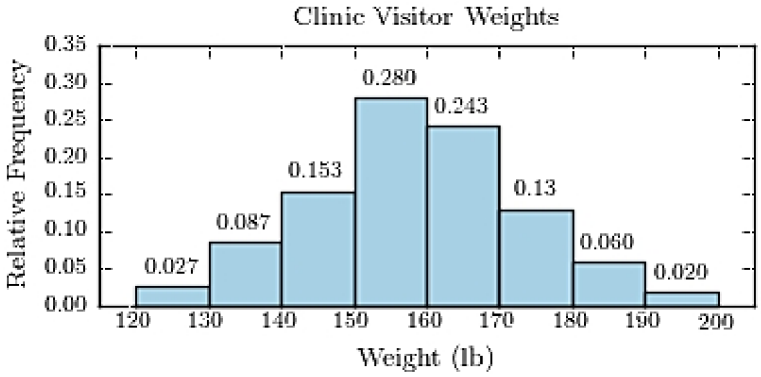


Elementary Statistics 2nd edition Navidi Test Bank

C)



D)



17) The following table presents the purchase totals (in dollars) of a random sample of gasoline purchases at a convenience store. 17) _____

Construct a frequency distribution using a class width of 10, and using 0 as the lower class limit for the first class.

76.59	48.55	93.66	60.17	39.10
93.28	65.43	34.12	80.41	77.16
80.07	93.46	39.19	43.84	44.70
68.74	89.98	6.97	52.86	68.93

Elementary Statistics 2nd edition Navidi Test Bank

A)

Convenience Store Gas Purchases	
Amount (dollars)	Frequency
0.00-9.99	1
10.00-19.99	0
20.00-29.99	0
30.00-39.99	3
40.00-49.99	3
50.00-59.99	1
60.00-69.99	4
70.00-79.99	2
80.00-89.99	3
90.00-99.99	3

B)

Convenience Store Gas Purchases	
Amount (dollars)	Frequency
0.00-9.99	1
10.00-19.99	0
20.00-29.99	1
30.00-39.99	2
40.00-49.99	3
50.00-59.99	1
60.00-69.99	4
70.00-79.99	2
80.00-89.99	3
90.00-99.99	3

C)

Convenience Store Gas Purchases	
Amount (dollars)	Frequency
0.00-9.99	1
10.00-19.99	0
20.00-29.99	0
30.00-39.99	3
40.00-49.99	3
50.00-59.99	1
60.00-69.99	4
70.00-79.99	2
80.00-89.99	4
90.00-99.99	2

D)

Convenience Store Gas Purchases	
Amount (dollars)	Frequency
0.00-9.99	1
10.00-19.99	0
20.00-29.99	0
30.00-39.99	4
40.00-49.99	2
50.00-59.99	1
60.00-69.99	4
70.00-79.99	2
80.00-89.99	3
90.00-99.99	3

18) The following table presents the purchase totals (in dollars) of a random sample of gasoline purchases at a convenience store. 18) _____

Construct a relative frequency distribution using a class width of 10, and using 0 as the lower class limit for the first class.

44.52	72.67	51.20	59.41	64.86
98.05	80.24	56.18	51.93	46.17
88.08	46.49	24.48	50.26	36.77
27.61	6.56	22.75	36.65	74.55

Elementary Statistics 2nd edition Navidi Test Bank

A)

Convenience Store Gas Purchases	
Amount (dollars)	Relative Frequency
0.00-9.99	0.035
10.00-19.99	0.015
20.00-29.99	0.150
30.00-39.99	0.100
40.00-49.99	0.150
50.00-59.99	0.250
60.00-69.99	0.050
70.00-79.99	0.100
80.00-89.99	0.100
90.00-99.99	0.050

B)

Convenience Store Gas Purchases	
Amount (dollars)	Relative Frequency
0.00-9.99	0.050
10.00-19.99	0.000
20.00-29.99	0.150
30.00-39.99	0.100
40.00-49.99	0.150
50.00-59.99	0.250
60.00-69.99	0.040
70.00-79.99	0.110
80.00-89.99	0.100
90.00-99.99	0.050

C)

Convenience Store Gas Purchases	
Amount (dollars)	Relative Frequency
0.00-9.99	0.050
10.00-19.99	0.000
20.00-29.99	0.150
30.00-39.99	0.100
40.00-49.99	0.150
50.00-59.99	0.250
60.00-69.99	0.050
70.00-79.99	0.100
80.00-89.99	0.100
90.00-99.99	0.050

Elementary Statistics 2nd edition Navidi Test Bank

D)

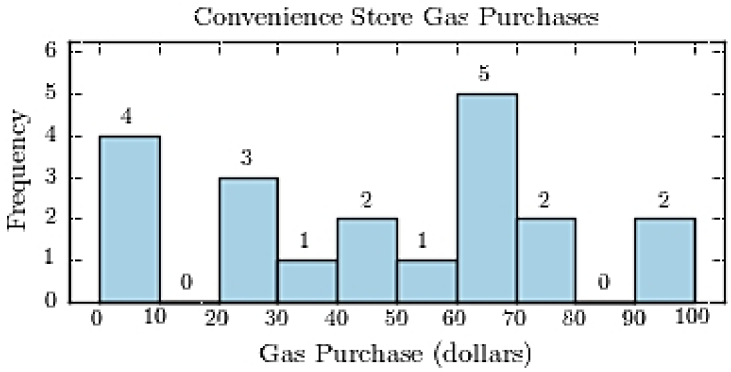
Convenience Store Gas Purchases	
Amount (dollars)	Relative Frequency
0.00-9.99	0.050
10.00-19.99	0.000
20.00-29.99	0.150
30.00-39.99	0.100
40.00-49.99	0.150
50.00-59.99	0.240
60.00-69.99	0.060
70.00-79.99	0.100
80.00-89.99	0.100
90.00-99.99	0.050

19) The following table presents the purchase totals (in dollars) of a random sample of gasoline purchases at a convenience store. 19) _____

Construct a frequency histogram using a class width of 10, and using 0 as the lower class limit for the first class.

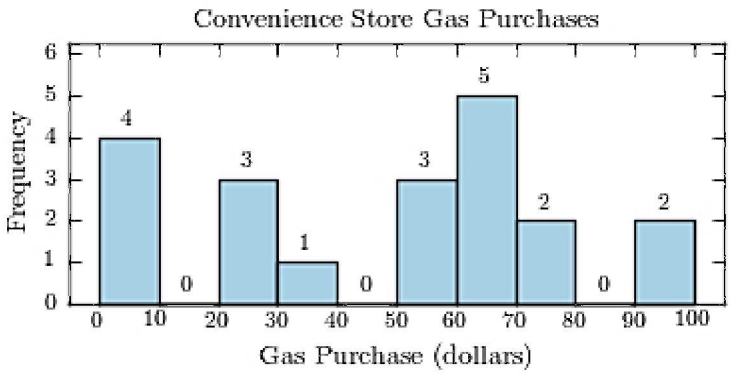
95	99	4	75	23
26	27	65	68	69
31	7	72	67	46
0	46	1	53	67

A)

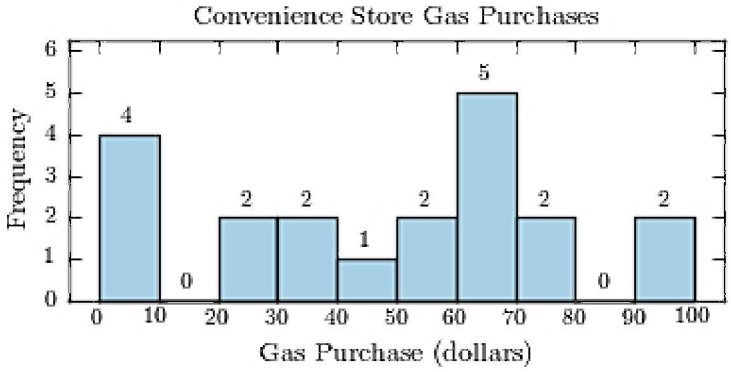


Elementary Statistics 2nd edition Navidi Test Bank

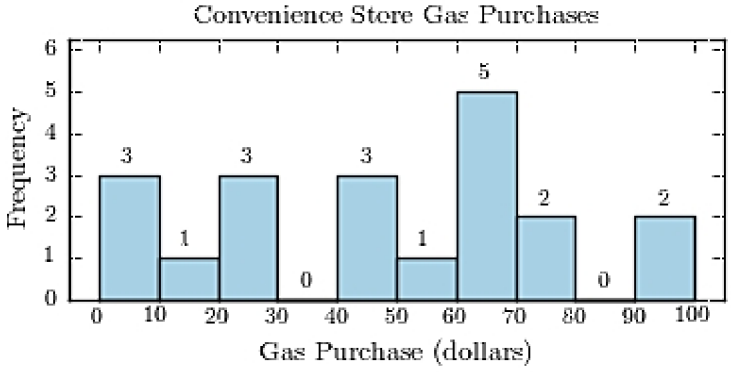
B)



C)



D)



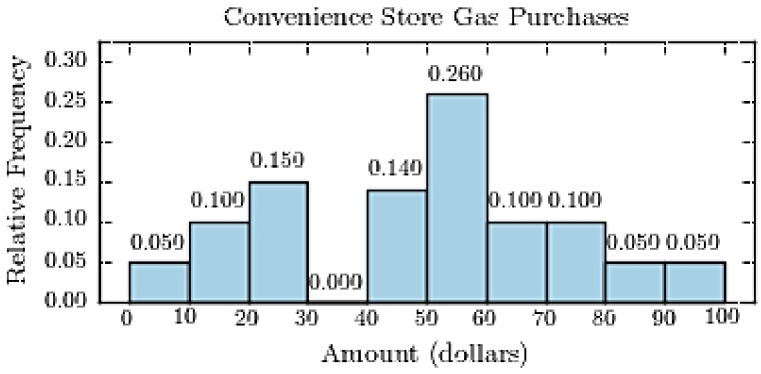
20) The following table presents the purchase totals (in dollars) of a random sample of gasoline purchases at a convenience store. 20) _____

Construct a relative frequency histogram using a class width of 10, and using 0 as the lower class limit for the first class.

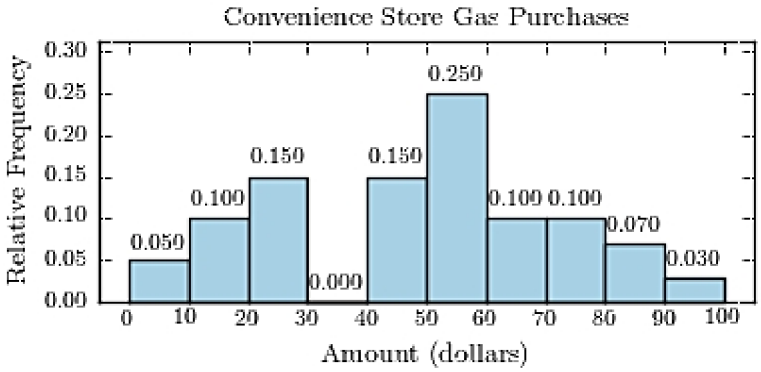
22.75	53.99	60.56	86.86	10.98
28.88	77.87	5.04	68.60	40.07
74.42	52.19	94.89	29.08	50.87
13.49	50.49	43.20	55.53	49.59

Elementary Statistics 2nd edition Navidi Test Bank

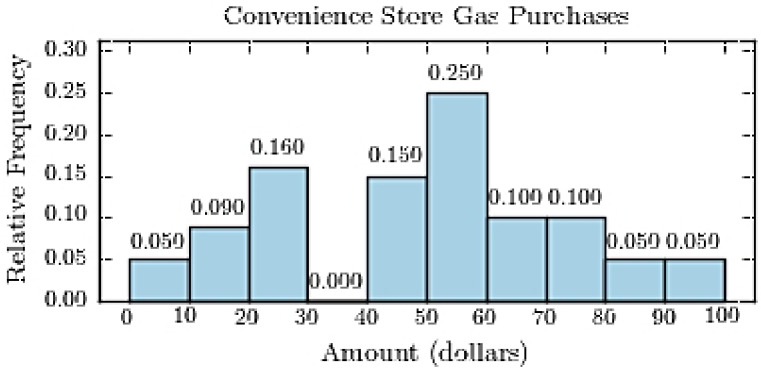
A)



B)

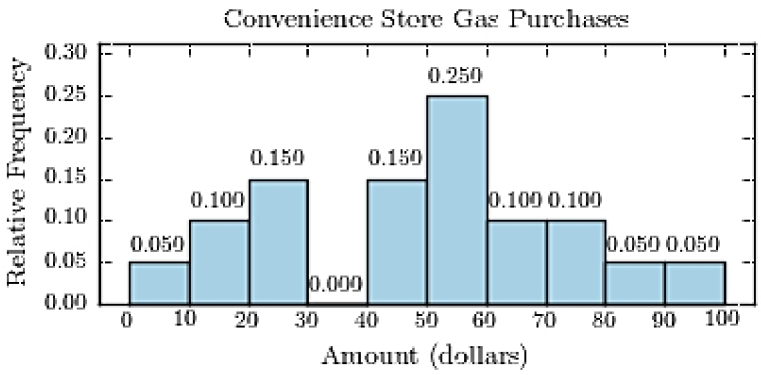


C)



Elementary Statistics 2nd edition Navidi Test Bank

D)

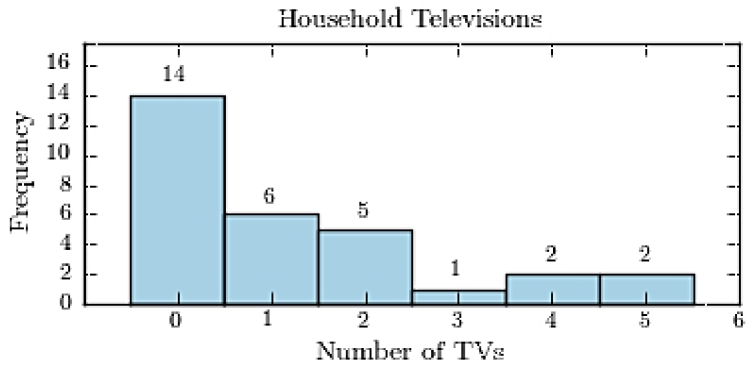


21) Thirty households were surveyed for the number of televisions in each home. Following are the results. 21) _____

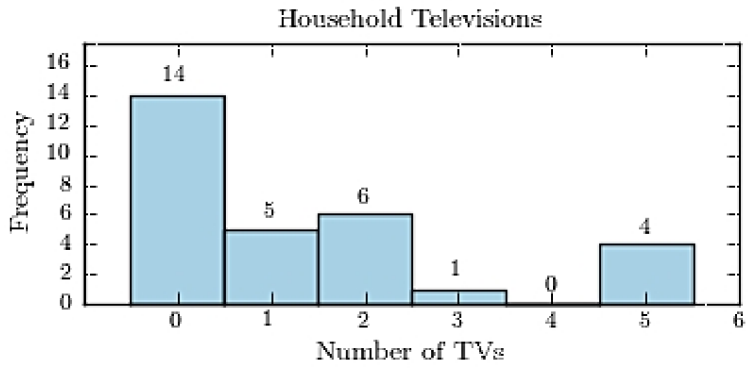
1	0	0	2	1	2	4	2	1	1
0	0	0	0	1	5	0	2	0	0
0	0	2	1	0	0	5	5	3	0

Construct a frequency histogram.

A)

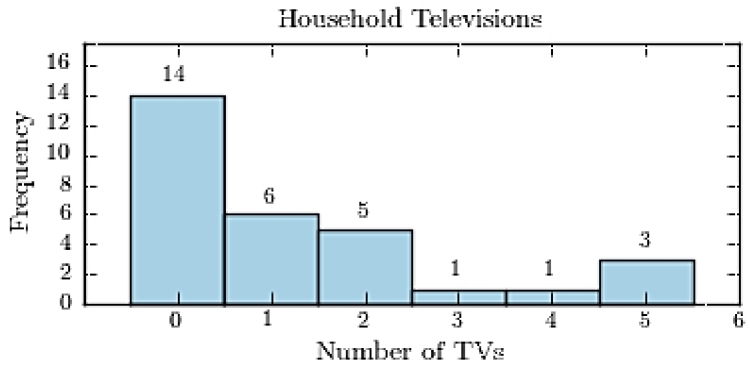


B)

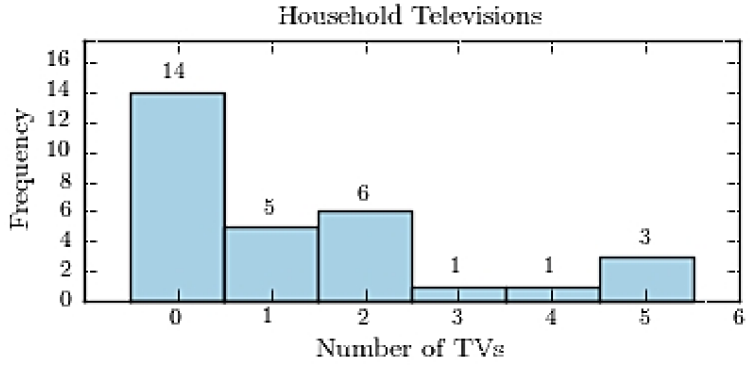


Elementary Statistics 2nd edition Navidi Test Bank

C)



D)

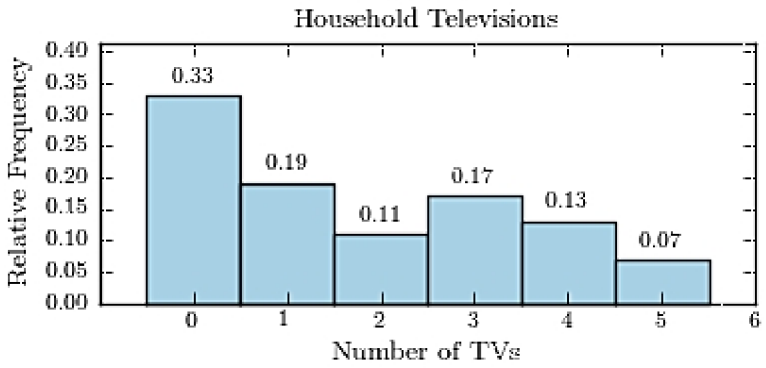


22) Thirty households were surveyed for the number of televisions in each home. Following are the results. 22) _____

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

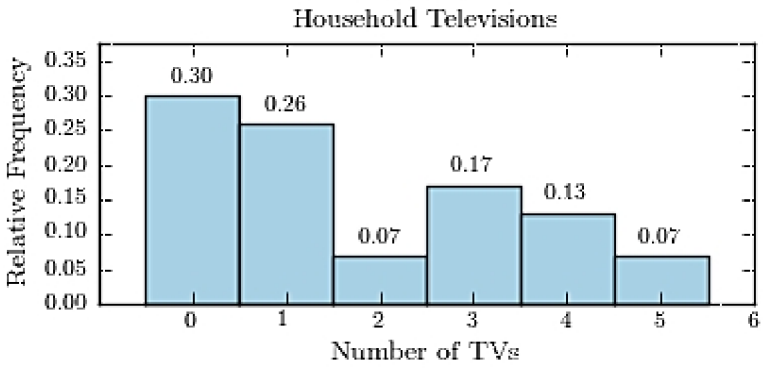
Construct a relative frequency histogram.

A)

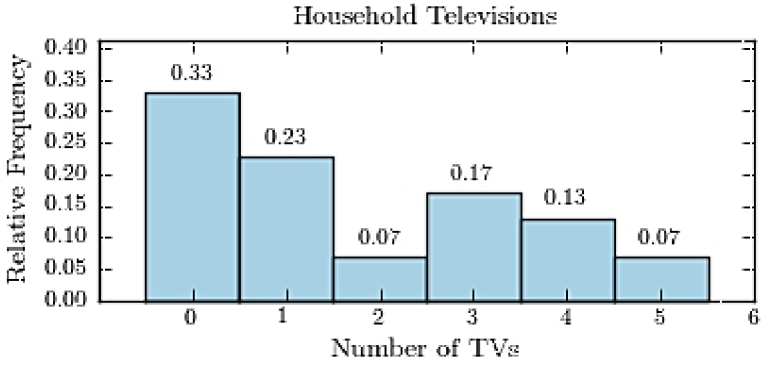


Elementary Statistics 2nd edition Navidi Test Bank

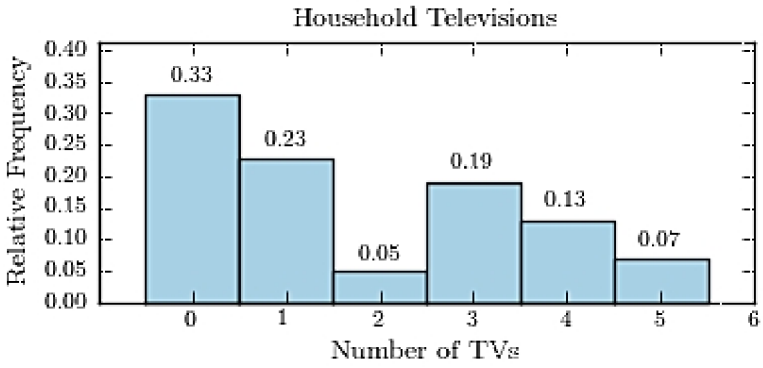
B)



C)



D)



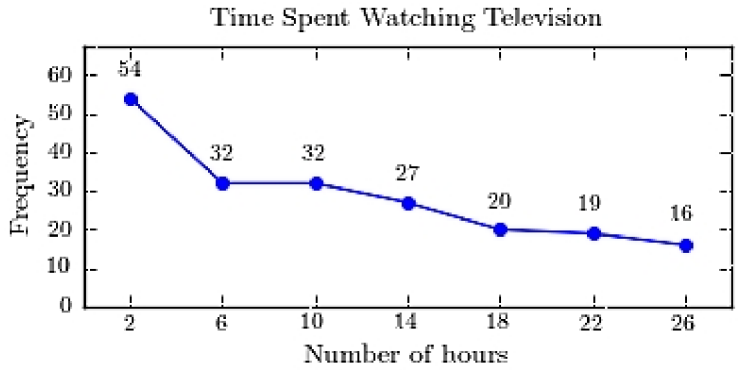
Elementary Statistics 2nd edition Navidi Test Bank

23) A sample of 200 high school students were asked how many hours per week they spend watching television.The following frequency distribution presents the results. 23) _____

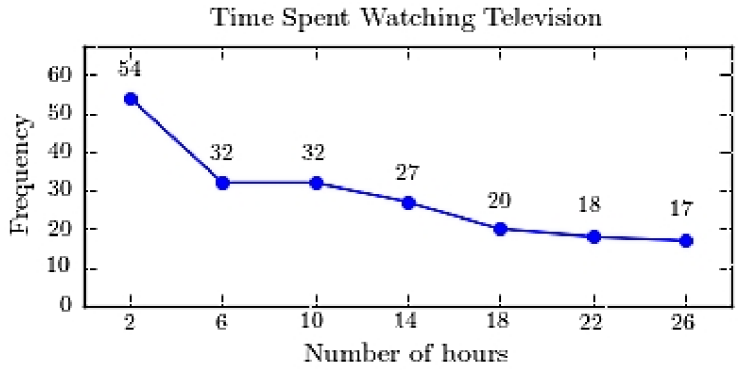
Time Spent Watching Television	
Number of hours	Frequency
0.0-3.9	54
4.0-7.9	32
8.0-11.9	32
12.0-15.9	27
15.0-19.9	20
20.0-23.9	18
24.0-27.9	17

Construct a frequency polygon for the frequency distribution.

A)

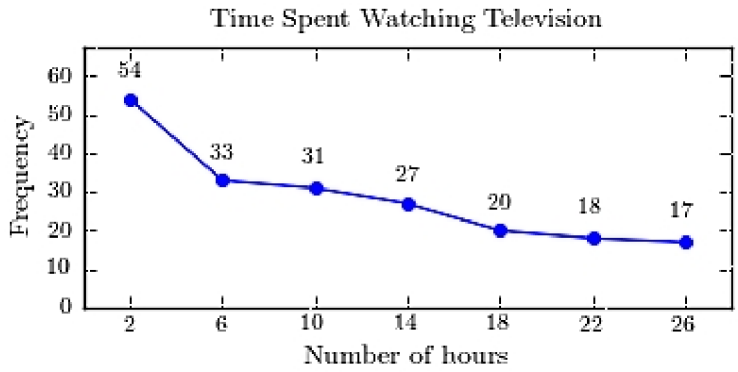


B)

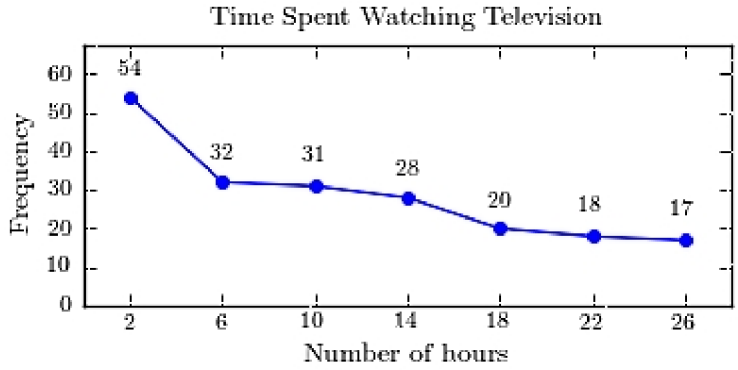


Elementary Statistics 2nd edition Navidi Test Bank

C)



D)



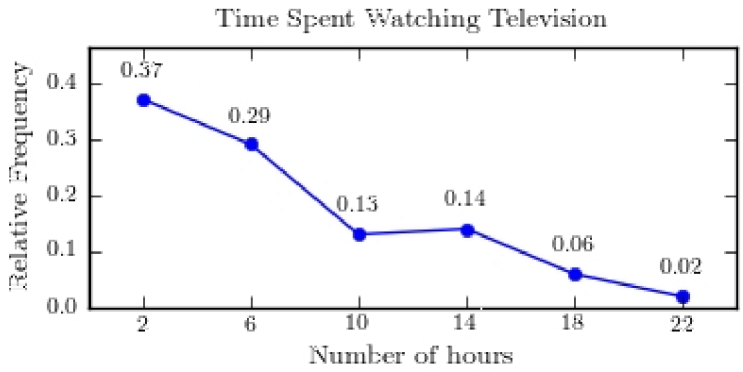
24) A sample of 200 high school students were asked how many hours per week they spend watching television.The following frequency distribution presents the results. 24) _____

Time Spent Watching Television	
Number of hours	Frequency
0.0-3.9	74
4.0-7.9	57
8.0-11.9	35
12.0-15.9	18
16.0-19.9	12
20.0-23.9	4

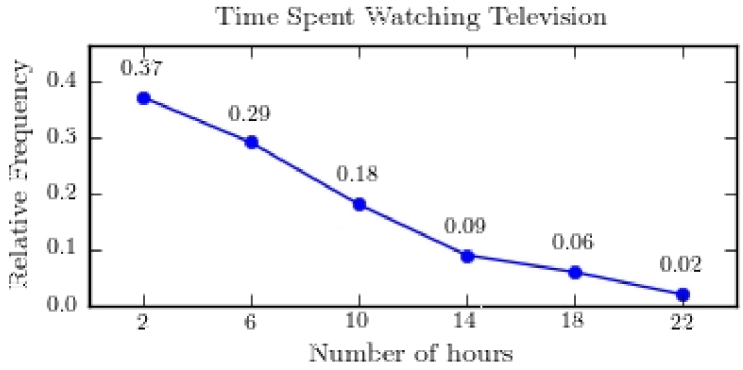
Construct a relative frequency polygon for the frequency distribution.

Elementary Statistics 2nd edition Navidi Test Bank

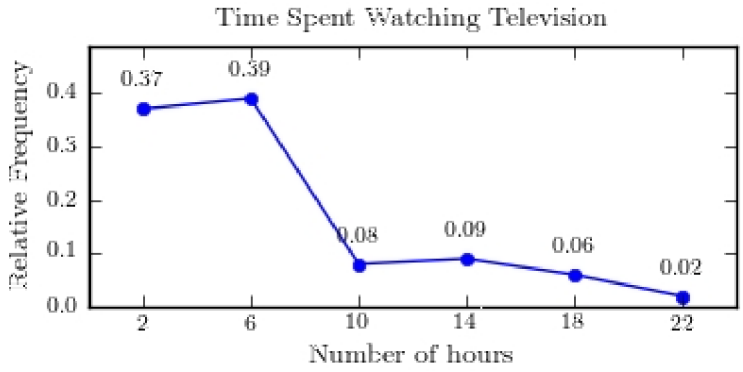
A)



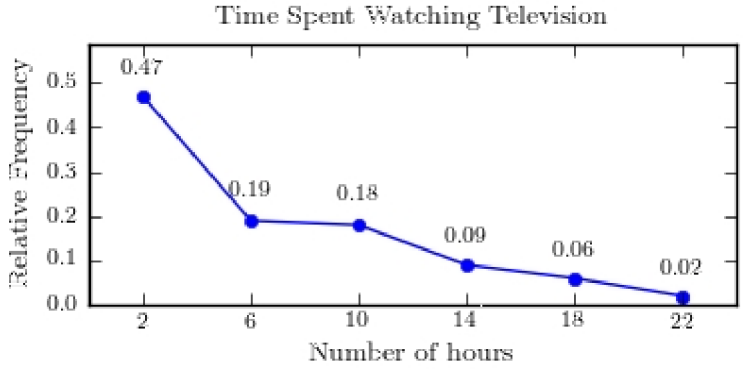
B)



C)



D)



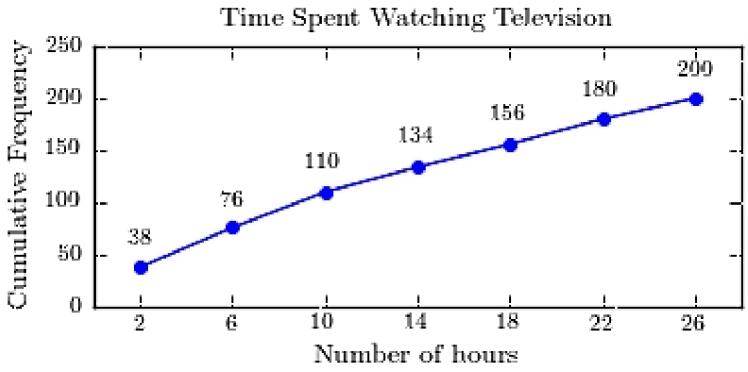
Elementary Statistics 2nd edition Navidi Test Bank

25) A sample of 200 high school students were asked how many hours per week they spend watching television.The following frequency distribution presents the results. 25) _____

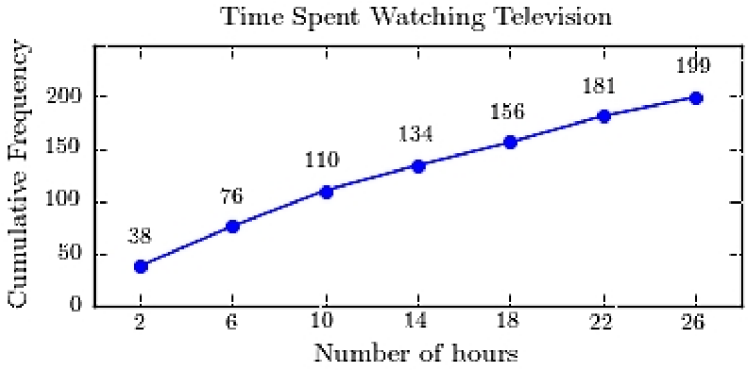
Time Spent Watching Television	
Number of hours	Frequency
0.0-3.9	38
4.0-7.9	38
8.0-11.9	34
12.0-15.9	23
15.0-19.9	24
20.0-23.9	23
24.0-27.9	20

Construct a frequency ogive for the frequency distribution.

A)

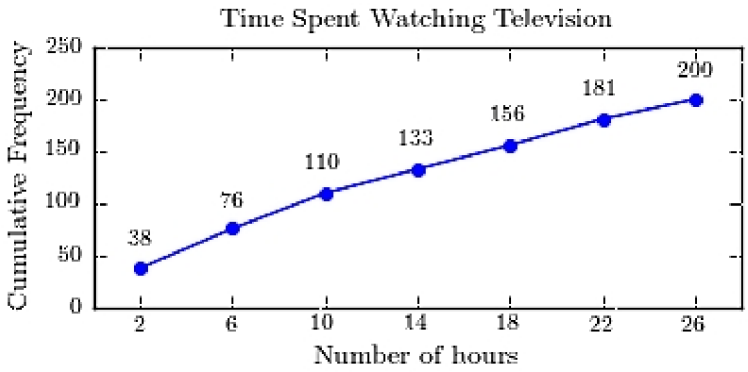


B)

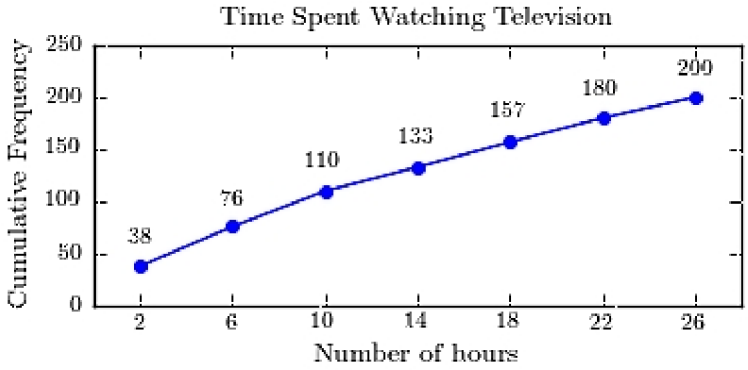


Elementary Statistics 2nd edition Navidi Test Bank

C)



D)



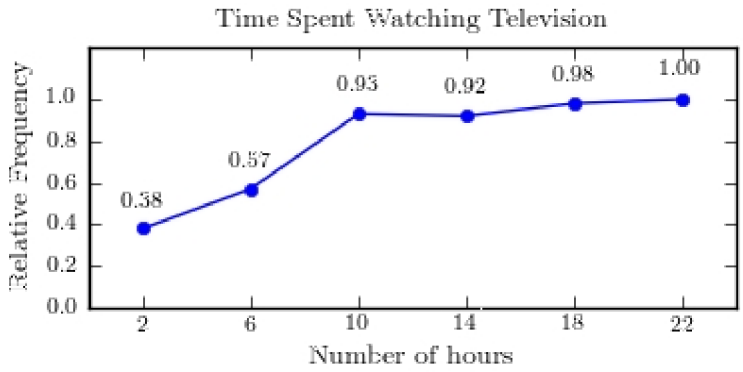
26) A sample of 200 high school students were asked how many hours per week they spend watching television.The following frequency distribution presents the results. 26) _____

Time Spent Watching Television	
Number of hours	Frequency
0.0-3.9	76
4.0-7.9	57
8.0-11.9	32
12.0-15.9	18
16.0-19.9	13
20.0-23.9	4

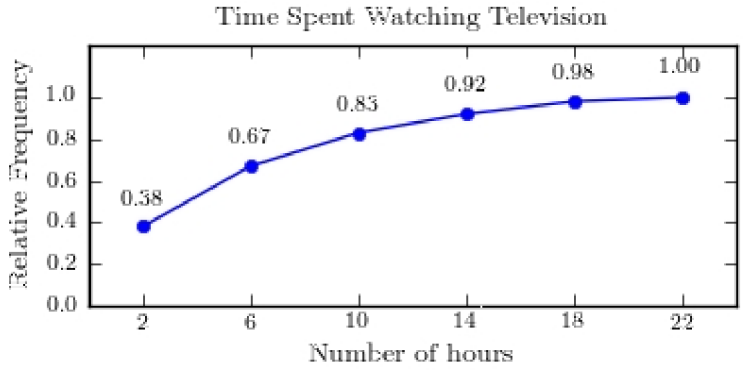
Construct a relative frequency ogive for the frequency distribution.

Elementary Statistics 2nd edition Navidi Test Bank

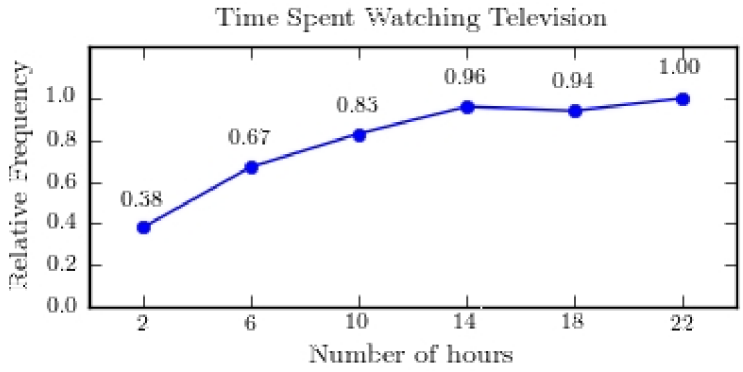
A)



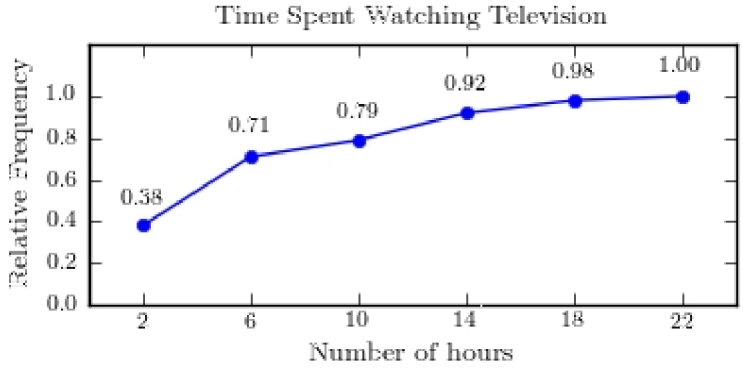
B)



C)



D)



Elementary Statistics 2nd edition Navidi Test Bank

27) Construct a stem-and-leaf plot for the following data. 27) _____

22	38	51	12	57	33	67	20	31	29
19	48	19	31	29	53	54	21	22	55

A)

1	299
2	012299
3	1138
4	8
5	13457
6	7

B)

1	29
2	0122999
3	1138
4	8
5	13457
6	7

C)

1	99
2	0122299
3	1138
4	8
5	13457
6	7

D)

1	299
2	02299
3	11138
4	8
5	13457
6	7

Elementary Statistics 2nd edition Navidi Test Bank

28) Construct a stem-and-leaf plot for the following data, in which the leaf represents the tenths place. 28) _____

8.9	6.7	4.3	9.9	9.3	10.6	9.5	7.8	3.0	5.3	8.1	10.6
6.1	9.2	10.4	9.7	9.8	10.6	6.8	3.0	7.6	9.3	3.9	6.2

A)

3	009
4	
5	337
6	128
7	68
8	19
9	2335789
10	4666

B)

3	009
4	33
5	
6	278
7	168
8	19
9	2335789
10	4666

C)

3	09
4	03
5	3
6	1278
7	68
8	19
9	23356789
10	466

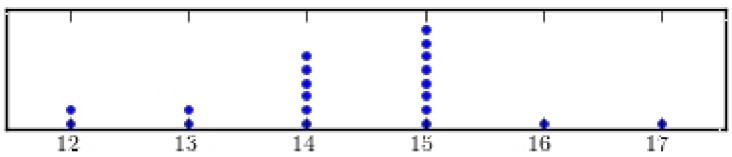
D)

3	009
4	3
5	3
6	1278
7	68
8	19
9	2335789
10	4666

29) Construct a dotplot for the following data. 29) _____

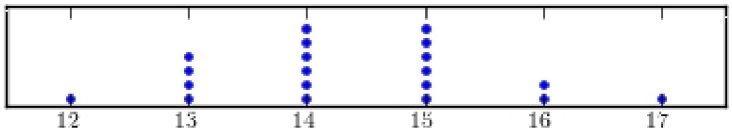
15	15	15	14	13	13	14	15	13	15
14	15	14	13	17	15	14	12	16	15

A)

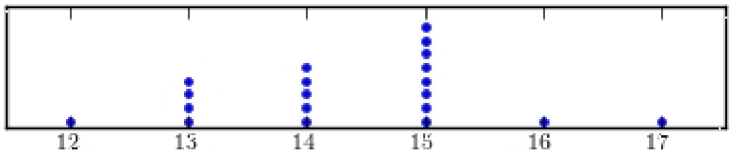


Elementary Statistics 2nd edition Navidi Test Bank

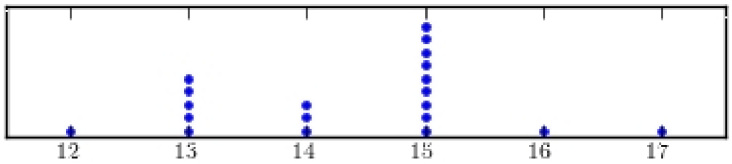
B)



C)



D)

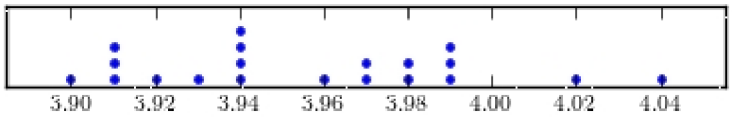


Elementary Statistics 2nd edition Navidi Test Bank

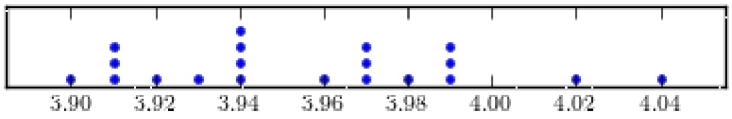
30) Construct a dotplot for the following data. 30) _____

3.99	4.02	3.97	3.94	3.94	3.92	3.91	3.91	3.92	4.04
3.98	3.94	3.96	3.97	3.94	3.99	3.93	3.90	3.97	3.99

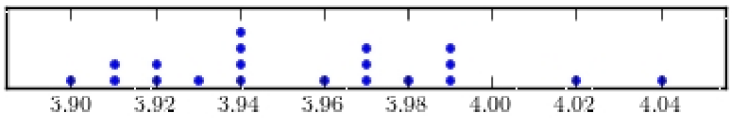
A)



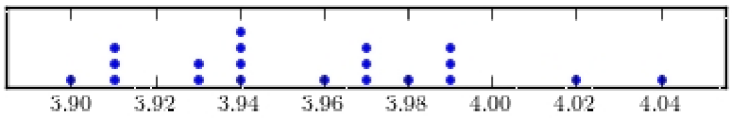
B)



C)



D)

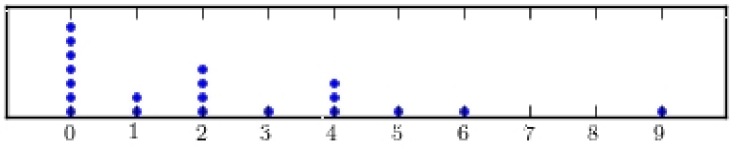


31) Following are the numbers of Dean's List students in a random sample of 20 university courses. Construct a dotplot for these data. 31) _____

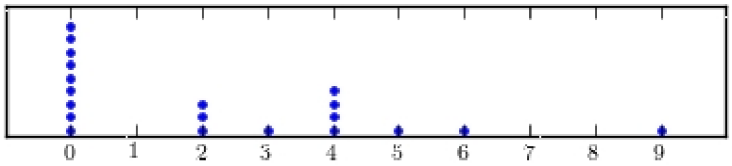
9	2	0	0	4
2	0	0	4	0
4	2	0	0	5
6	1	2	0	4

Elementary Statistics 2nd edition Navidi Test Bank

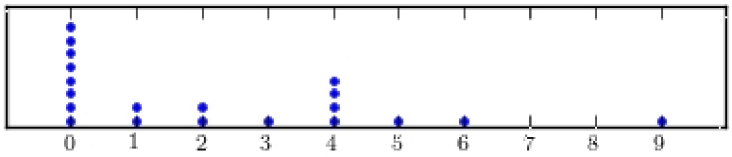
A)



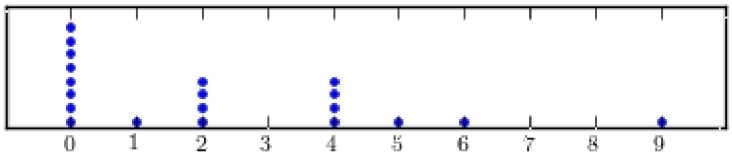
B)



C)



D)

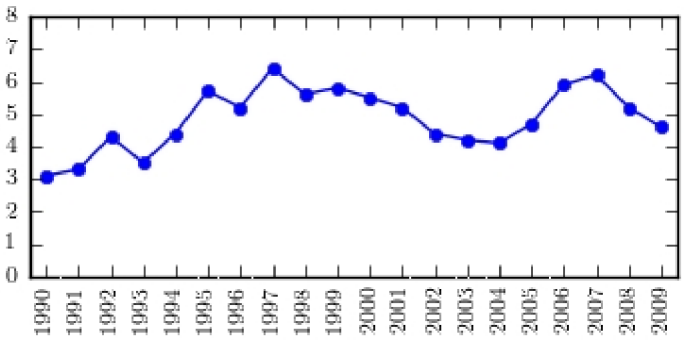


32) The following table presents the rate of population growth of a suburb of Atlanta, Georgia for each of the years 1990 through 2009. Construct a time-series plot of the growth rate. 32) _____

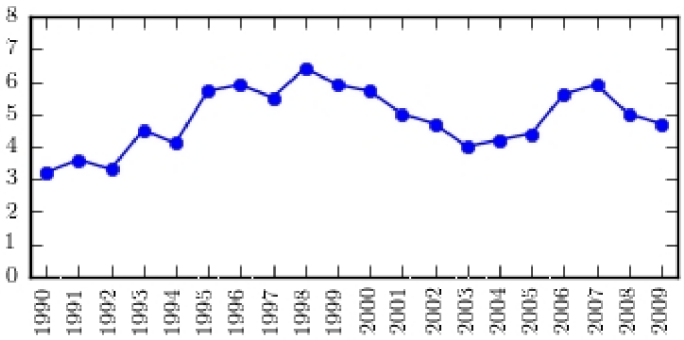
Year	Percent Growth	Year	Percent Growth
1990	3.1	2000	5.5
1991	3.3	2001	5.2
1992	4.3	2002	4.4
1993	3.5	2003	4.2
1994	4.4	2004	4.1
1995	5.7	2005	4.7
1996	5.2	2006	5.9
1997	6.4	2007	6.2
1998	5.6	2008	5.2
1999	5.8	2009	4.6

Elementary Statistics 2nd edition Navidi Test Bank

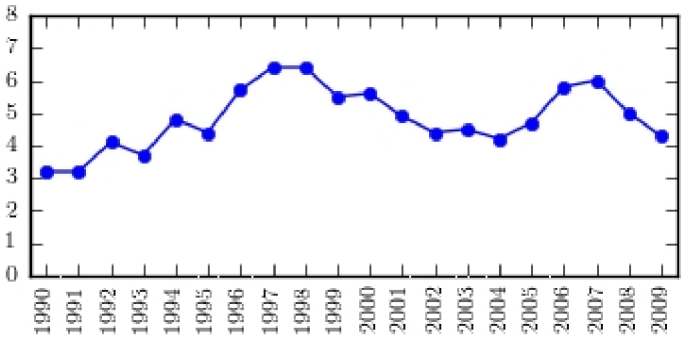
A)



B)

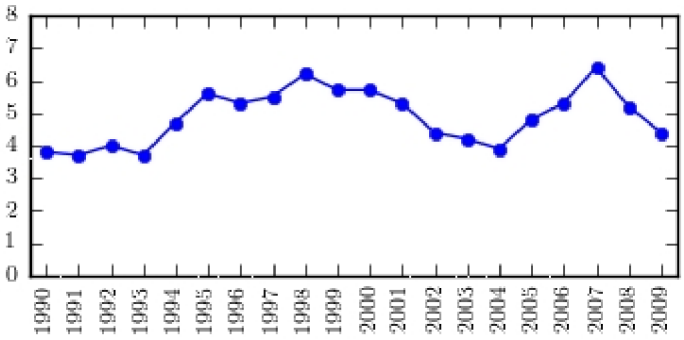


C)

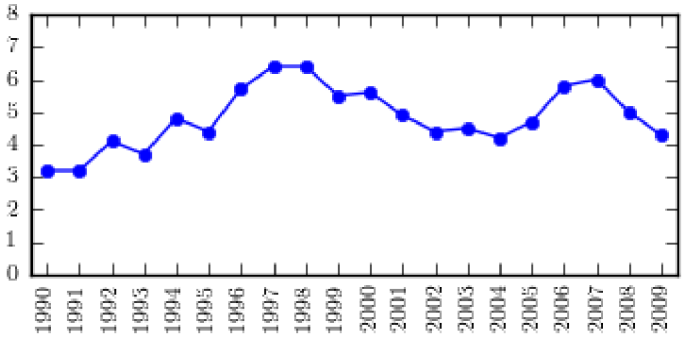


Elementary Statistics 2nd edition Navidi Test Bank

D)

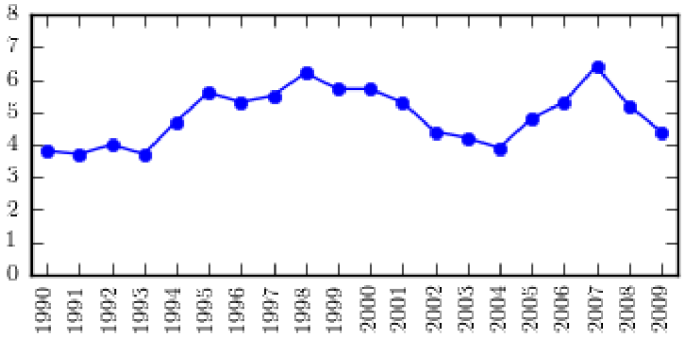


33) The following time-series plot presents the population growth (in percent) of a suburb of Atlanta, Georgia for each of the years 1990 through 2009. Estimate the rate of growth in 2009. 33) _____



A) 4.9% B) 4.7% C) 4.2% D) 4.8%

34) The following time-series plot presents the population growth (in percent) of a suburb of Atlanta, Georgia for each of the years 1990 through 2009. Estimate the amount by which the rate of growth changed from 1998 to 2001. 34) _____

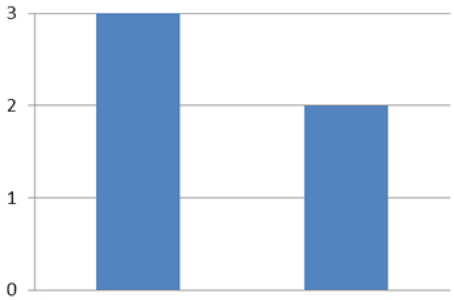


A) about -0.9 percentage points B) about -1.8 percentage points
C) about -0.2 percentage points D) about 0.2 percentage points

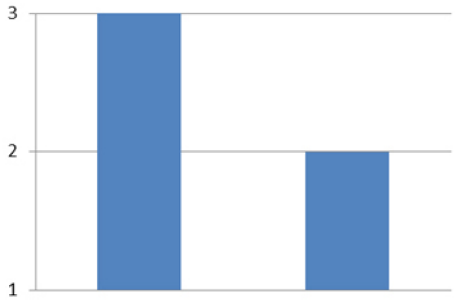
Elementary Statistics 2nd edition Navidi Test Bank

35) Which of the following presents the most honest graphical representation of the ratio "3 to 2"? 35) _____

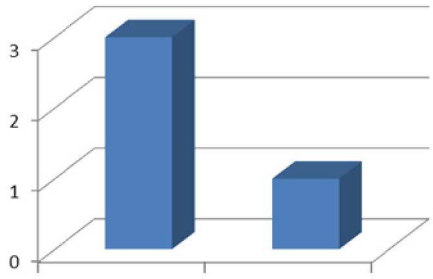
A)



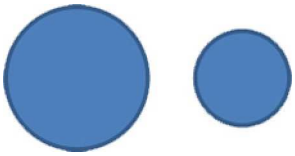
B)



C)



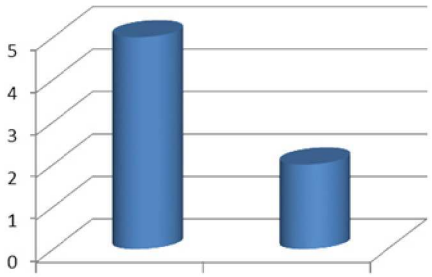
D)



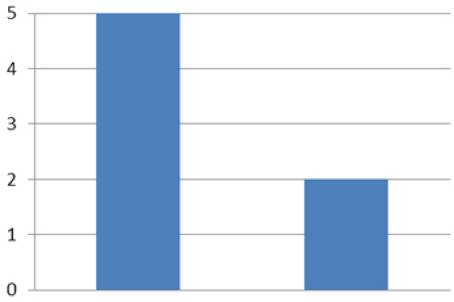
Elementary Statistics 2nd edition Navidi Test Bank

36) Which of the following presents the most honest graphical representation of the ratio "5 to 2"? 36) _____

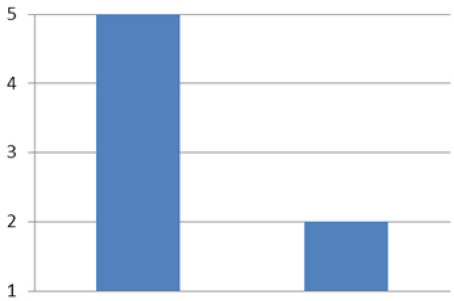
A)



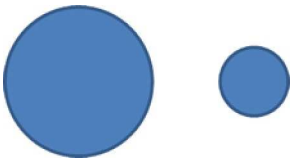
B)



C)



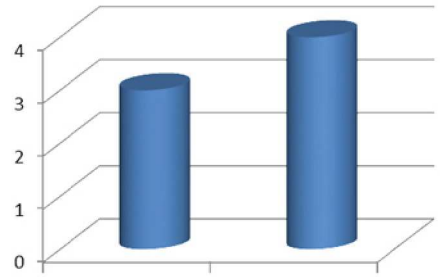
D)



Elementary Statistics 2nd edition Navidi Test Bank

37) Which of the following presents the most honest graphical representation of the ratio "3 to 4"? 37) _____

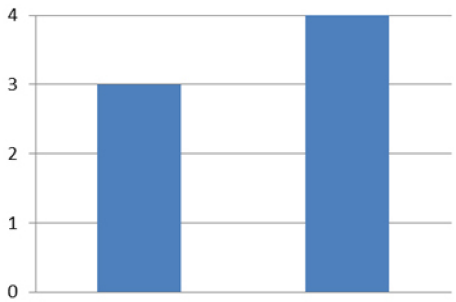
A)



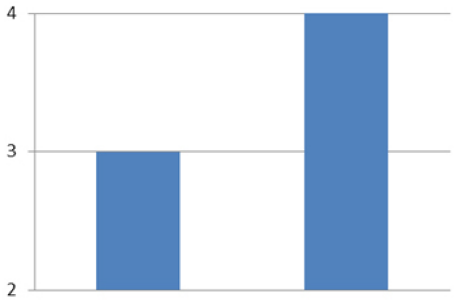
B)



C)



D)



Elementary Statistics 2nd edition Navidi Test Bank

1) C
2) C
3) B
4) B
5) A
6) B
7) B
8) B
9) A
10) D
11) C
12) A
13) A
14) B
15) A
16) C
17) A
18) C
19) A
20) D
21) C
22) C
23) B
24) B
25) D
26) B
27) A
28) D
29) C
30) B
31) D
32) A
33) C
34) A
35) A
36) B
37) C

Elementary Statistics 2nd edition Navidi Test Bank