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***Problems 1***

1. From our sample of 1-year total percentage returns achieved by domestic general stock Funds whose marketing fees are paid from fund assets, the raw data are presented as follows.

……..

a) Compute the median, mean, and midhinge.

b) Describe the shape.

1. Suppose that our sample consists of the net asset values of 14 domestic general stock funds that are classified as small capitalization blend funds. The raw data, displaing the net asset values (in dollars) for this funds, are as follows.

………..

a) Compute the median, mean, and midhinge.

b) Describe the shape.

1. Given the following set of data from a sample of size n=6.

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1. Compute the mean, mode, midrange,
2. Compute the range, interquartile range, variance,
3. Given the following set of data from a sample of size n=6.

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1. Compute the midhinge.
2. variance, standard deviation, and coefficient of variation.
3. Given the following set of data from a sample of size n=6.

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1. Compute the mean, median, and midhinge.
2. Describe the shape.
3. Given the following set of data from a sample of size n=6.

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1. Compute the mean, median,.
2. Compute the range, interquartile range
3. Describe the shape.
4. Given the following set of data from a sample of size n=6.

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* 1. Compute the mean, median, mode,.
  2. Compute the range, interquartile range
  3. Describe the shape.

1. Given the following set of data from a sample of size n=6.

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1. Compute the mean, and midhinge.
2. Compute the, variance, standard deviation, and coefficient of variation.
3. Given the following set of data from a sample of size n=6.

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1. Compute the mean, median, and midhinge.
2. Describe the shape.
3. A manufacturer of flashlight batteries took a sample of 13 batteries from a day’s production and used them continuously until they were drained. The numbers of hours they were used until failure were

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a) Compute the mean, median, mode, midrange, and midhinge

b) calculate the range, variance, standard deviation.

c) how would you describe the shape of the data set?

1. The data displayed here represent the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

Raw Data on Utility Charges ($)

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Form a frequency distribution having 5 class intervals

1. The data displayed here represent the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

Raw Data on Utility Charges ($)

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Form a frequency distribution having 6 class intervals

1. The data displayed here represent the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

Raw Data on Utility Charges ($)

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Form a frequency distribution having 7class intervals

1. The following data represent the book values for the energy consumption during June in two randomly chosen buildings in big city.

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1. Set up the class boundaries for a frequency distribution (if 5 intervals are desired)
2. Construct a frequency distribution and a percentage distribution
3. Round what value is focused on payment for the energy consumption.
4. The following data represent the book values for the energy consumption during June in two randomly chosen buildings in big city.

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1. Set up the class boundaries for a frequency distribution (if 6 intervals are desired)
2. Construct a frequency distribution and a percentage distribution
3. Round what value is focused on payment for the energy consumption.
4. The following data represent the book values for the energy consumption during June in two randomly chosen buildings in a big city.

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1) Set up the class boundaries for a frequency distribution (if 7 intervals are desired)

1. Construct a frequency distribution, proportion and a percentage distribution
2. Round what value is focused on payment for the energy consumption.
3. The following data are the book values (in dollars, i.e., net worth divided by number of outstanding shares) for a random sample of 50 stocks from the New York Stock Exchange:

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Construct a frequency distribution and a percentage distribution.

1. In the past several years, credit card companies have made an aggressive effort to solicit new accounts from college students. Suppose that a sample of … students at your college indicated the following information as to whether the student possessed a bank credit card and/or a travel and entertainment credit card:

Travel and Entertainment Credit Card

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| --- | --- | --- |
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a) Give an example of a simple event

c) What is the complement of having a bank credit card?

If a student is selected at random, what is the probability that

e) the student has a bank credit card?

g) the student has a bank credit card *and* a travel and entertainment card?

h) the student has neither a bank credit card nor a travel and entertainment card?

j) the student does not have a bank credit card or a travel and entertainment card?

1. In the past several years, credit card companies have made an aggressive effort to solicit new accounts from college students. Suppose that a sample of … students at your college indicated the following information as to whether the student possessed a bank credit card and/or a travel and entertainment credit card:

Travel and Entertainment Credit Card

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b) Give an example of a joint event

d) Why is “having a bank credit card and having a travel and entertainment credit card” a joint event?

If a student is selected at random, what is the probability that

f) the student has a travel and entertainment credit card?

i) the student has a bank credit card or a travel and entertainment card?

1. A sample of … respondents was selected in a large metropolitan area to determine various information concerning consumer behavior. Among the questions asked was “Do You enjoy shopping for clothing?” Of … males, … answered yes. Of … females, … answered yes.

a) set up a 2\*2 table

c) Give an example of a joint event.

d) Give an example of a simple event.

d) ) What is the complement of “enjoy shopping for clothing”?

What is the probability that a respondent chosen at random

e) is a male?

f) is a female *and* enjoys shopping for clothing?

g) is a female *or* enjoys shopping for clothing?

h) is a male *or* female?

i) enjoys shopping for clothing?

j) is a male *and* does not enjoy shopping for clothing?

k) is a male *or* does not enjoy shopping for clothing?

1. Given the following probability distribution:

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| --- | --- |
| Distribution A | |
| X | P ( X ) |
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Compute the expected value and the standard deviation

1. Given the following probability distribution:

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| Distribution B | |
| X | P ( X ) |
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Compute the expected value and the standard deviation

1. Given the following probability distributions:

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| --- | --- |
| Distribution A | |
| X | X (P) |
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a) Compute the expected value for the distribution.

b) Compute the standard deviation for the distribution.

1. An advertising executive is studying television viewing habits of married men and women during prime-time hours. Based on past viewing records, the executive has determined that during prime time, husbands are watching television …% of the time. When the husband is watching television, …% of the time the wife is also watching. When the husband is not watching television, …% of the time the wife is watching television. Find the probability that the wife is watching television during prime time.
2. Olive Construction Company is determining whether it should submit a bid for a new shopping center. In the past, Olive’s main competitor, Base Construction Company, has submitted bids …% of the time. If Base Construction Company does not bid on a job, the probability that Olive Construction Company will get the job is … . If Base Construction Company bids on a job, the probability that Olive Construction Company will get the job is … . What is the probability that Olive Construction Company will get the job?
3. In the past several years, credit card companies have made an aggressive effort to solicit new accounts from college students. Suppose that a sample of … students at your college indicated the following information as to whether the student possessed a bank credit card and/or a travel and entertainment credit card:
4. Determine the following:

a) If n = … and p = … , then what is P (X = …)

b) If n = … and p = … , then what is P (X = …)

1. Determine the following:

a) If n = … and p = … , then what is P (X = …)

b) If n = … and p = … , then what is P (X = …)