

ST 260, M04

Graphical Displays 2

Graphical Displays of Data

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Lesson Objectives



- Learn how to construct two graphs for a categorical variable.
- Learn two additional graphs useful for two quantitative variables.
- Learn a tabular method useful for seeing the relationship between two categorical variables.

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Graphs

- Histogram
 - Stem-and-leaf plot
- } → for a single quantitative variable
- Bar Chart
 - Pie Chart
- } → for a single qualitative variable

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Bar Chart

Number of times each city appeared

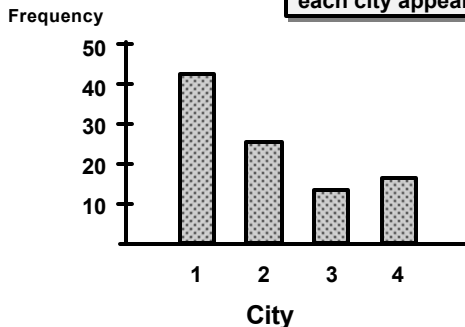
Count of City	
City	Total
1	43
2	26
3	14
4	17
Grand Total	100

From an Excel Pivot Table

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Bar Chart

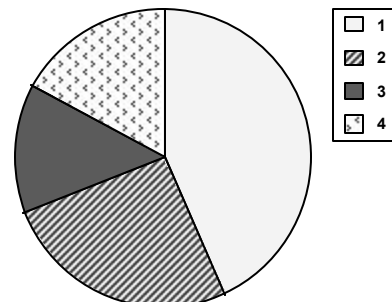
Number of times each city appeared



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Pie Chart

City



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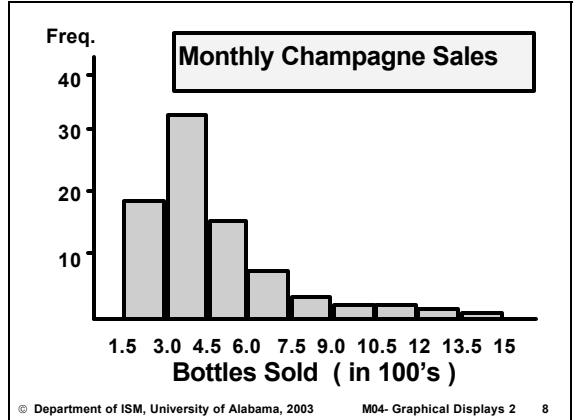
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James Bartel runs a liquor store. How many bottles of champagne should he have in inventory each month?

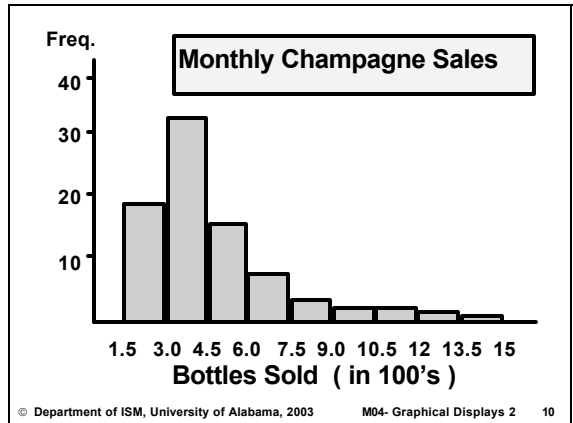
First step: Gather data

Monthly records for number of bottles sold over last seven years.



Recall what to look for in a data distribution:

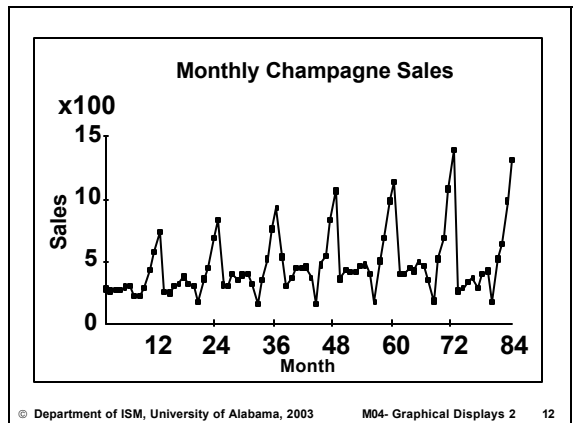
-
-
-
-



Graphs

-

for a single quantitative variable observed over time

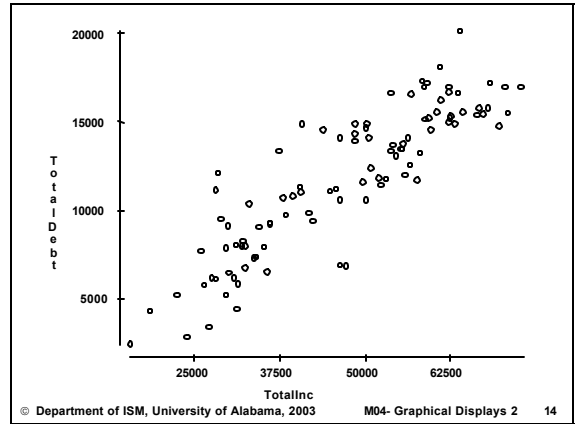


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Graphs

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Graphs

- Time series plot
- Scatterplot
- Two-way table → for two qualitative variables

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Two-Way Frequency Table

Rows are levels of Own?
Columns are levels of City

	1	2	3	4	total
0	8 18.6	12 46.2	5 35.7	10 58.8	35 35
1	35 81.4	14 53.8	9 64.3	7 41.2	65 65
total	43 100	26 100	14 100	17 100	100 100

table contents:
Count
Percent of Column Total

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