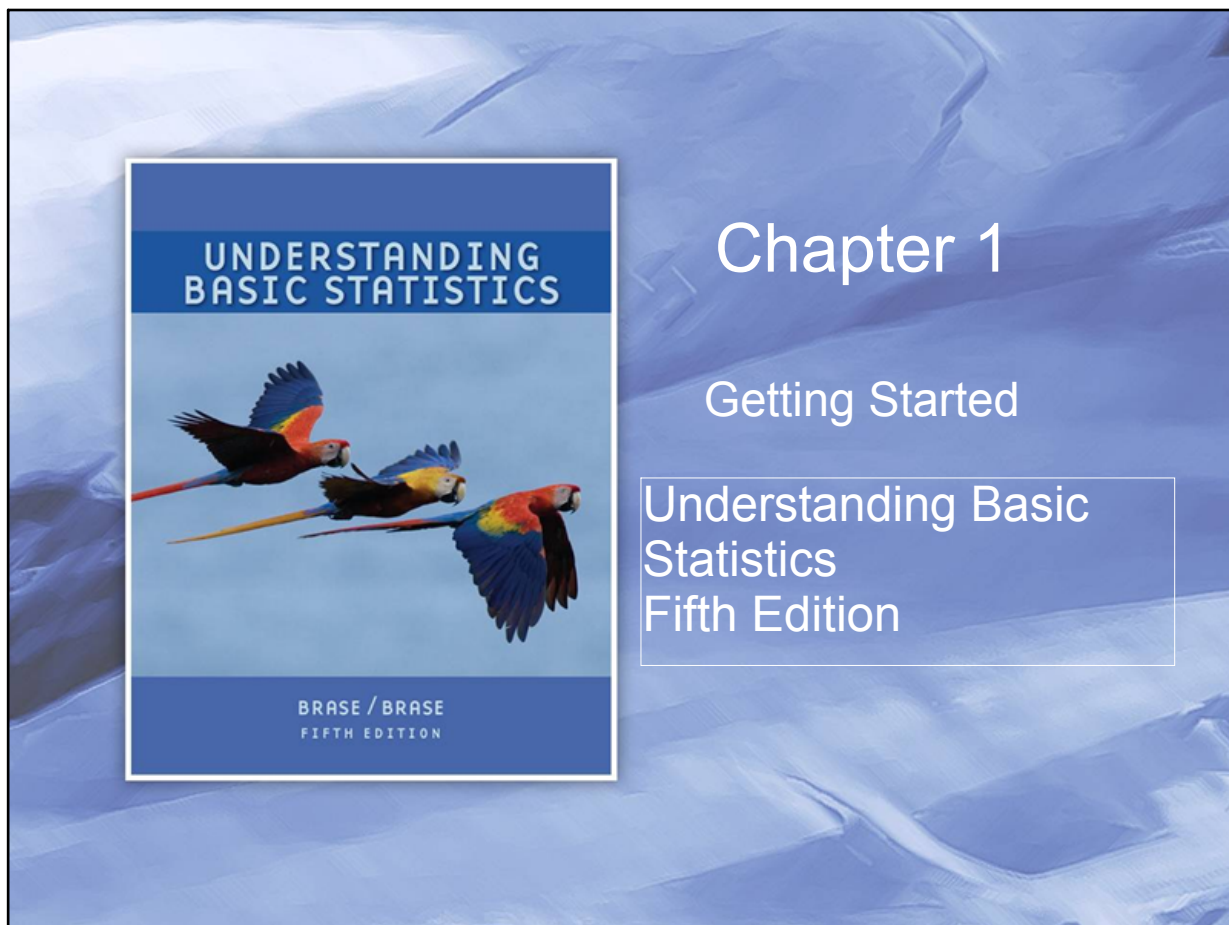


Fill in the note card at your table.

- 1) Full Name
- 2) Do you go to Vo-tec? AM or PM
- 3) Do you have a computer/laptop?
- 4) Do you have Internet?
- 5) Plans after graduation?

Mar 8-7:20 AM



Aug 28-2:40 PM

What is Statistics?

- Collecting data
 - Organizing data
 - Analyzing data
 - Interpreting data
- Nominal
Ordinal
Interval
Ratio



Aug 28-2:40 PM

Individuals and Variables

- Individuals are people or objects included in the study.
- Variables are characteristics of the individual to be measured or observed.

~~POP~~: Students
Seniors
Statistics class

Sample:



Aug 28-2:40 PM

Variables

- Quantitative Variable – The variable is numerical, so operations such as adding and averaging make sense.
- Qualitative Variable – The variable describes an individual through grouping or categorization.

Gender
Race
Haircolor
Sports



Aug 28-2:40 PM

Variables

- Quantitative Variable – The variable is numerical, so operations such as adding and averaging make sense.
- Qualitative Variable – The variable describes an individual through grouping or categorization.

Which of the following is an example of a qualitative variable?

1 Answer?

- a). Age b). Mass
c). Religious preference d). Batting average



Aug 28-2:40 PM

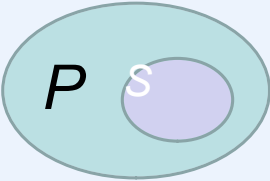
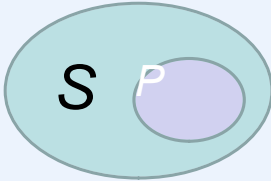
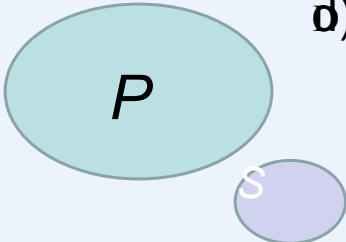
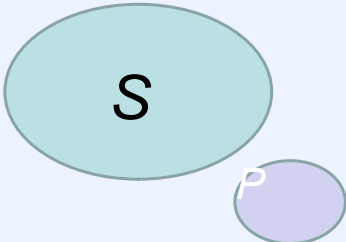
Data

- Population Data – The data are from *every* individual of interest. parameter
- Sample Data – The data are from *only some* of the individuals of interest. Statistic



Data

Which of the following Venn diagrams shows the relationship between population data and sample data?

- a).  b).  2 Answer?
- c).  d). 



Levels of Measurement

- Nominal Level – The data consists of names, labels, or categories. *Lowest*
- Ordinal Level – The data can be ordered, but the differences between data values are ~~are~~ meaningless.

OK Like it Love it



Levels of Measurement

Subtraction

- ~~Interval~~ Level – The data can be ordered and the differences between data values are meaningful.

- Ratio Level – The data can be ordered, differences and ratios are meaningful, and there is a meaningful zero value.

Divide



Login your clickers.

Read page 7 again the EXAMPLE 2 about the LEVELS of Measurement.

Then use your note card to practice the guided exercise 2 on pages 8-9.

Mar 9-6:52 AM

Levels of Measurement

The freezing points of four liquids are 32°F, 6°F, 13°F, and 20°F. What is the level of these measurements?

3 Answer?

- a). Nominal = Name
- b). Ordinal = Order
- c). Interval = Difference Subtract
- * d). Ratio = Divide



Critical Thinking

- Reliable statistical conclusions require reliable data.
- When selecting a variable to measure, specify the process and requirement for the measurement.
- Pay attention to the measurement instrument and the level of measurement.
- Are the data from a sample or from the entire population?
 parameter *Statistic*



Two Branches of Statistics

- Descriptive Statistics: Organizing, summarizing, and graphing information from populations or samples.
- Inferential Statistics: Using information from a sample to draw conclusions about a population.



- ① Pyp. 10-11
1-10 all #12
- ② 1,2 vocab
- ③ Read Pyp. 12-17 all
- ④ Portfolios Due Mon.

Mar 9-8:32 AM