

# STT200 – Lecture 1, Section 02,04.

## Recitation 1

(September 4<sup>th</sup>. 2012)

TA: Zhen (Alan) Zhang

[zhangz19@stt.msu.edu](mailto:zhangz19@stt.msu.edu)

Office hour: (C500 WH) 1:45 – 2:45PM Tu  
(office tel: 432-3342)

Help-room: (A102 WH) 11:20AM-12:30PM, M,F

## About the recitation courses

- ❑ Sign attendance sheet.  $\geq 90\%$  of all 15 recitations, get 5 extra credits.  $< 90\%$ , i.e., miss two recitations: 0 pt;
- ❑ Two or three quizzes to recover 5pt;
- ❑ Exam oriented recitations: cover problems similar to that in the exams.
- ❑ Join the discussion: be positively involved.

## A brief review

- ❑ W's: Who, What, When, Where, When, Why, and How; population
- ❑ Variable types: Quantitative vs Categorical, Identifier.
- ❑ Page 16 of textbook, problems for this recitation: 1, 2, 4, 6, 14, 16, 18, 20, 22, 24, 26

## Quantitative or Categorical?

- #1: Responses: “Democrat”, “Republican”, “Independent”, “Other” and “No response”.
- #2: Responses: “Better”, “Worse”, “No Change”, “Don't know” and “No response”.
- #4. Increase in heart rate of patients.

# Who, What, and population?

□#6: Internet source: crab data. ([click](#) for description)

```
> crabs
```

```
   sp sex index  FL  RW  CL  CW  BD
1   B  M     1  8.1  6.7 16.1 19.0  7.0
2   B  M     2  8.8  7.7 18.1 20.8  7.4
3   B  M     3  9.2  7.8 19.0 22.4  7.7
4   B  M     4  9.6  7.9 20.1 23.1  8.2
5   B  M     5  9.8  8.0 20.3 23.0  8.2
6   B  M     6 10.8  9.0 23.0 26.5  9.8
7   B  M     7 11.1  9.9 23.8 27.1  9.8
8   B  M     8 11.6  9.1 24.5 28.4 10.4
9   B  M     9 11.8  9.6 24.2 27.8  9.7
10  B  M    10 11.8 10.5 25.2 29.3 10.3
11  B  M    11 12.2 10.8 27.3 31.6 10.9
12  B  M    12 12.3 11.0 26.8 31.5 11.4
13  B  M    13 12.6 10.0 27.7 31.7 11.4
14  B  M    14 12.8 10.2 27.2 31.8 10.9
15  B  M    15 12.8 10.9 27.4 31.5 11.0
16  B  M    16 12.9 11.0 26.8 30.9 11.4
. . . . .
198 O  F    48 21.9 17.2 42.6 47.4 19.5
199 O  F    49 22.5 17.2 43.0 48.7 19.8
200 O  F    50 23.1 20.2 46.2 52.5 21.1
```

Identify who, what,  
and population  
For each variable,  
Verify type

## W's and variable types

#14: The State Education Department require local school districts to keep records of all students:

age

race

days absent

current grade level

standardized test scores

Any disabilities or special educational needs

## W's and variable types

#16: A study reports pulling force of firefighters

Pulling force in newtons

Weight of firefighters

Sex of firefighter

## W's and variable types

#18: A study reports plants in southern England are flowering earlier.

□ First flowering dates for 385 species over 47 years



## W's and variable types

### #20: Data base of customers and sales information

- Name
- ID number
- Region of country (1=East, 2=South, 3=Midwest, 4=West)
- Date of last purchase
- Amount of purchase
- Item purchased

## W's and variable types

### #22: Data about vinyards

- Size (acres)
- Number of years in existence
- State
- Varieties of grapes grown
- Average case price
- Gross sales
- Percent profit

## W's and variable types

### #26: Fuel economy of automobiles

Manufacturer

Vehicle type

Weight

Horse-power

Gas mileage