

## Week 3. STAT1020 Discussion section – Issac Lee

### 1. Calculation of Statistics.

9, 1, 3, 2, 5, 4, 6, 7, 8

- a. Mean
- b. Median
- c. IQR
- d. Std.

### 2. Contingency table

**30. Politics** Students in an Intro Stats course were asked to describe their politics as “Liberal,” “Moderate,” or “Conservative.” Here are the results:

		Politics			Total
		L	M	C	
Sex	Female	35	36	6	77
	Male	50	44	21	115
	Total	85	80	27	192

- a) What percent of the class is male?
- b) What percent of the class considers themselves to be “Conservative”?
- c) What percent of the males in the class consider themselves to be “Conservative”?
- d) What percent of all students in the class are males who consider themselves to be “Conservative”?

### 3. Conditional distribution

- Find the conditional distributions of political views for the females and males.
- Make graphical display that compares the two distributions. Do the variables politics and sex appear to be independent?

### Do your self

**29. Seniors** Prior to graduation, a high school class was surveyed about its plans. The following table displays the results for white and minority students (the “Minority” group included African-American, Asian, Hispanic, and Native American students):

		Seniors	
		White	Minority
Plans	4-Year College	198	44
	2-Year College	36	6
	Military	4	1
	Employment	14	3
	Other	16	3

- What percent of the seniors are white?
  - What percent of the seniors are planning to attend a 2-year college?
  - What percent of the seniors are white and planning to attend a 2-year college?
  - What percent of the white seniors are planning to attend a 2-year college?
  - What percent of the seniors planning to attend a 2-year college are white?
- Find the conditional distributions of plans for the white and minority.
  - Make graphical display that compares the two distributions.