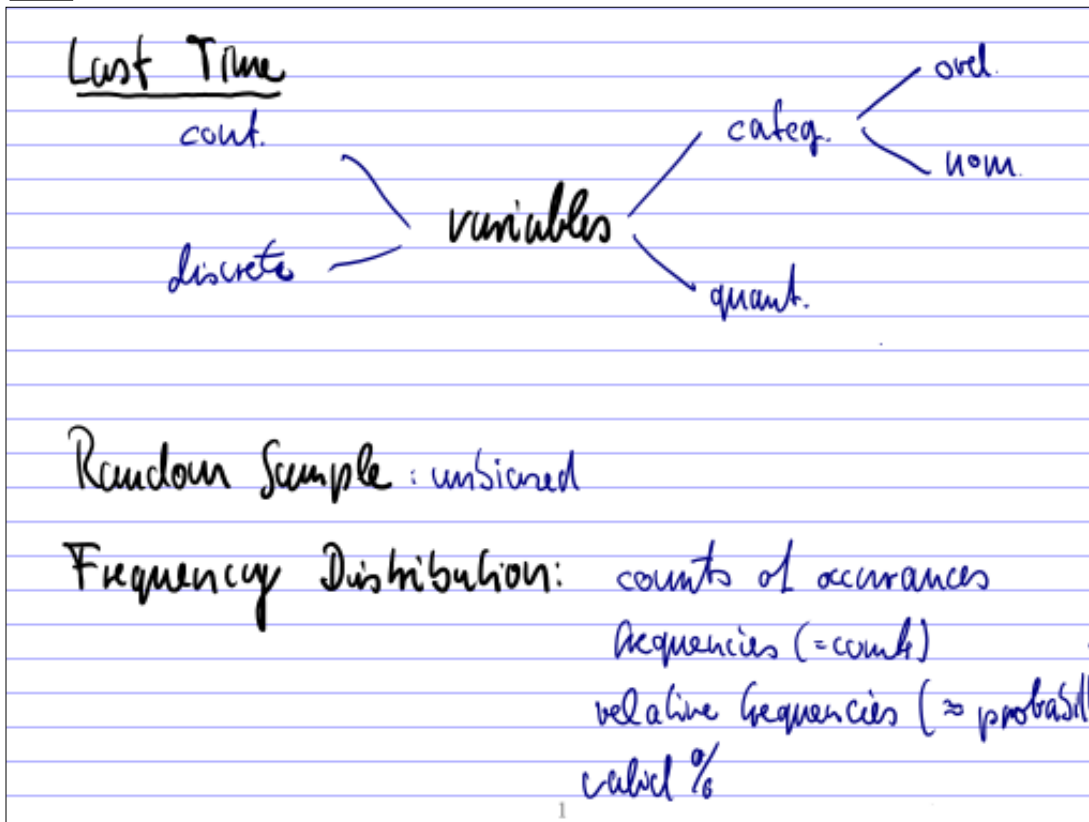


Panel 1



Panel 2

The BBC asked viewers to call in with their favorite song. 7500 people called, over half ⁴⁰⁰⁰ liked "Imagine". Does this represent a random sample? No! (arbitrary \neq random sample)

What is pop? All people in UK

sample? the 7500 people

statistics: $\frac{4000}{7500}$ liked

parameter: prop. (%) of all people who like song
(unknown)

Panel 3

Quiz #1 Name: _____

① Because of Greece's economic problems, it is important to know if Greeks want to remain in the EU. A random sample of 200 Greek citizens was selected and 120 want to remain in the EU. Identify.

Population:

Sample:

Statistics: $120/200 = 60\%$

3

Panel 4

2) Consider the survey on the right. How many variables? Are they nominal, ordinal, or quantitative?

Enter your name: _____

What is your cholesterol level: _____

How often do you visit a doctor: Often
 Sometimes
 Rarely
 Never

3.) To determine the level of pollution of the Hudson river, a scientist picks a random day to drive to the river and tell 10 boaters for testing. Is this a random sample?

4

Panel 5

Analyse the "highest degree" in GSS data.

a) how many have at least a BA ? 27%

b) how many have at most a HS degree? 63%

Frequency table results for HIGHEST DEGREE:

HIGHEST DEGREE	Frequency	Relative Frequency
0 - Less than HS	297	0.14688428
1 - High School	1003	0.49604353
2 - Junior College	173	0.085558854
3 - Bachelor	355	0.17556874
4 - Graduate	194	0.095944606

5

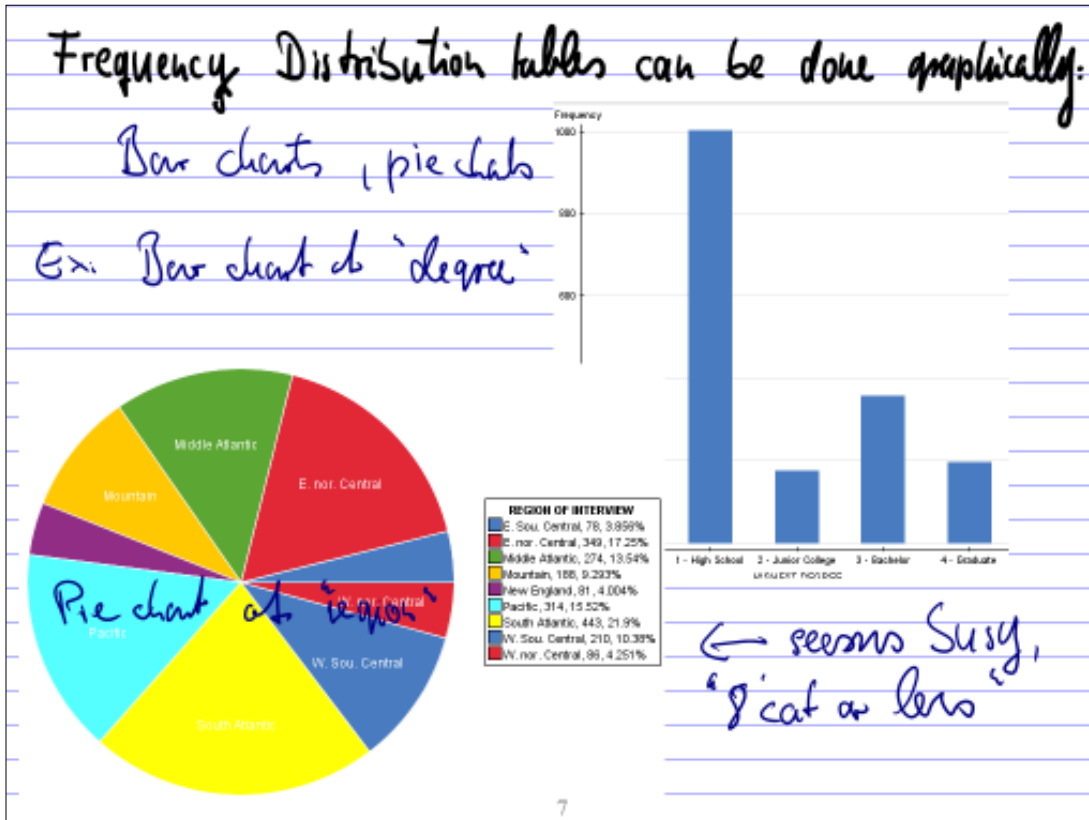
Panel 6

A survey about voter opinion results in the following frequency distribution:

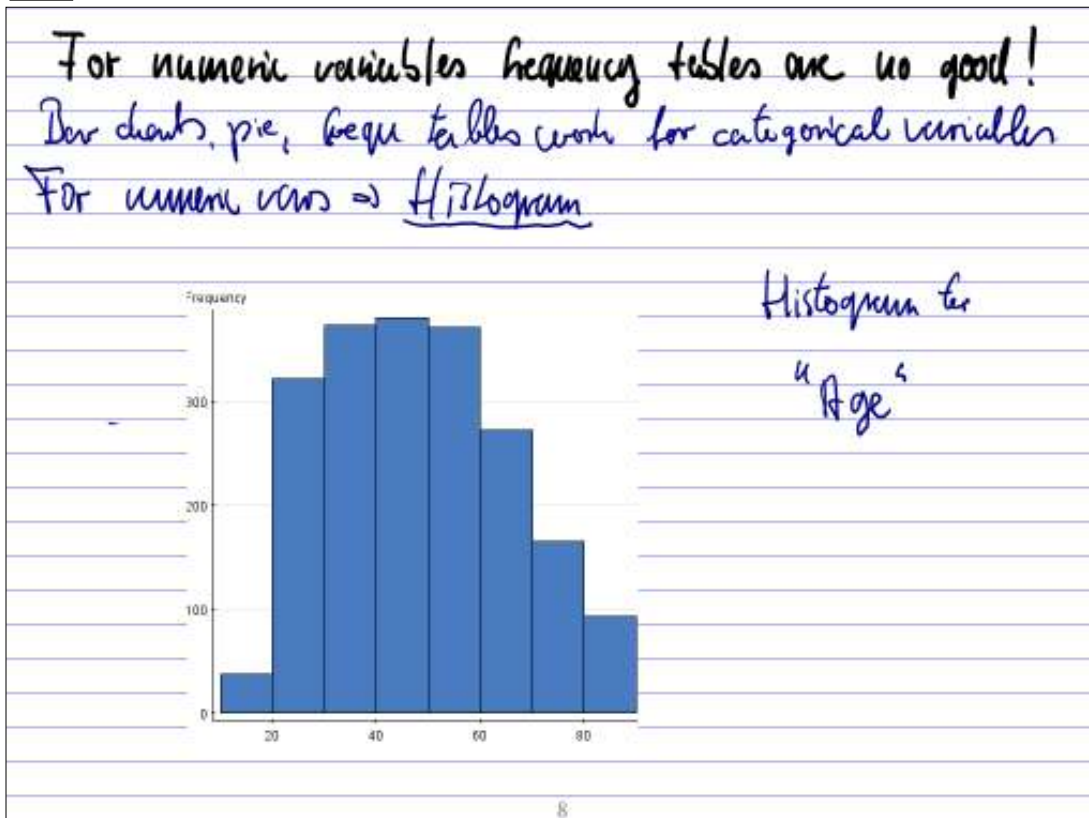
	freq.
a) What is the winning prob.?	0.05
very liberal	0.20
liberal	0.25
neutral	0.3
conservative	0.20
very conservative	<u>1</u>
b) How many people, in %, are liberal or very liberal?	<u>25%</u>

6

Panel 7



Panel 8



Panel 9

Create a Histogram by hand:

Data: 20, 22, 20, 50, 43, 41, 58, 21, 49, 33, 35, 36, 80, 22

① Find largest: 80
 smallest: 20 \rightarrow Range $80 - 20 = 60$

② Pick # of bins: 6 (5 to 10)

③ Find range: $80 - 20 = 60$

④ $\frac{\text{range}}{\# \text{ bins}} = \frac{60}{6} = 10 \leftarrow \text{round up} \approx 11$

⑤ table

	Credly
20-31	41 4
31-42	1111 4
42-53	11 2
53-64	1 1
64-75	1 1
75-86	11 2
	14

Panel 10

Homogeneous vs. Heterogeneous Distribution

next time!