

PSYC 60 – Statistics
Spring 2012
Notes #1

Webpage (including syllabus)

sdcc3.ucsd.edu/~mclaffey/

Course content

Study design –

Descriptive statistics -

Inferential statistics –

Penny Flipping Example

Which method produces the most heads in 10 flips?

Method 1

Method 2

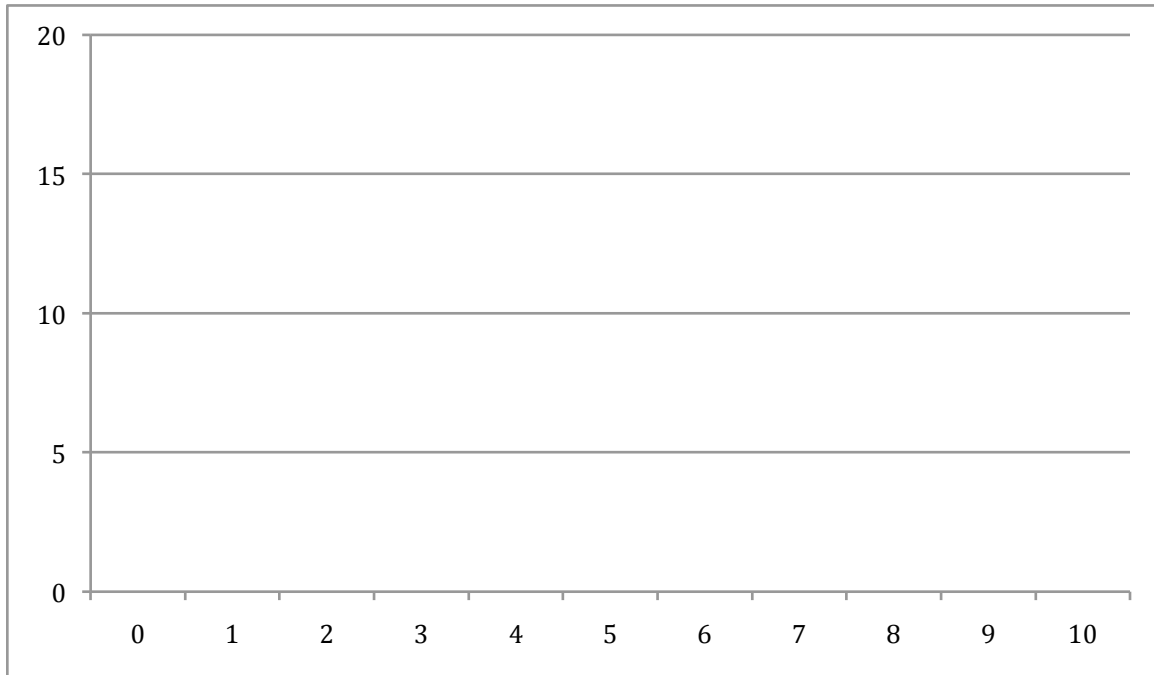
Method 3

Possible claims

What would happen by chance alone?

# of heads VALUE	# of people FREQUENCY	% of people RELATIVE FREQUENCY	Chance of this score or better CUMULATIVE FREQUENCY
10			
9			
8			
7			
6			
5			
4			
3			
2			
1			
0			

Chart type: _____



Possible outcomes:

6 heads exactly happens by chance ___%

9 heads or better happens by chance ___%

at least 3 heads away from expected value happens by chance ___%

Criteria for belief

What data could convince you to use a certain coin flipping technique for betting big money in Vegas?

What level of proof would you require?

___ heads or better happens ___ % problem:

___ heads of better happens ___ % problem:

Components of a statistical test

<u>Component</u>	<u>Example</u>

Future problems we need to address:

- 1.
- 2.

What do we do with statistics?

We can _____ our data

We can quantify what values we expect by _____ alone

We can identify events that _____ happen by chance which may signify there is an _____

We can decide whether to _____ that what we observed will hold true for future observations