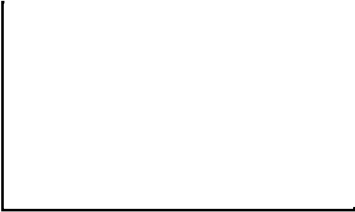
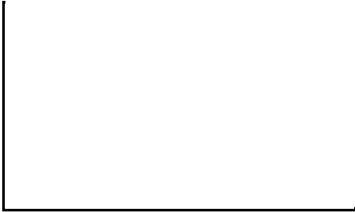




Graphing

Review: Different distributions or sample error?

	Different distributions	Single distribution
		
Drug		
Placebo		

What technique have we learned that would quantify whether there are two different distributions with two different population means?

Graphing variability

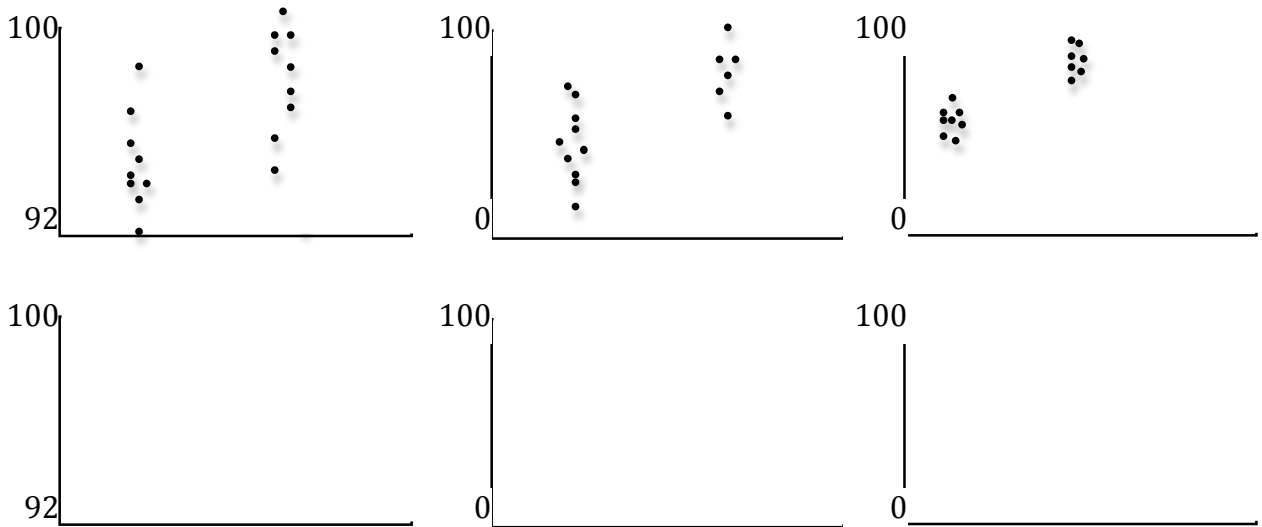
Class satisfaction scores (scale 0-10): 7, 8, 7, 9, 3, 6, 7, 7, 8, 6 (n=10, mean=6.8, s=1.6)



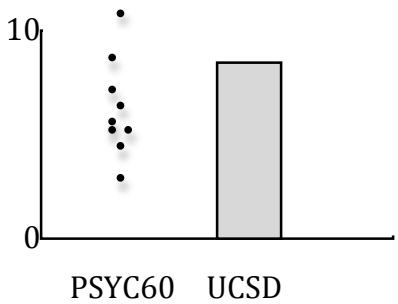
Variability and differences in means

Which graph has the largest difference between conditions?

Which graph has conditions with two different population means?



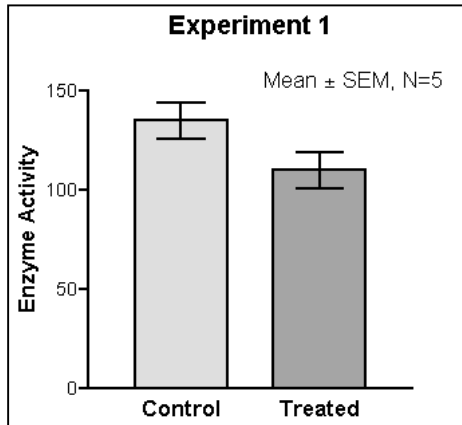
Visually estimating if an effect is significant



Are PSYC 60 ratings less than the UCSD average?

Is the difference between the sample _____ for PSYC 60 and the population _____ for UCSD statistically significant?

Independent 2-samples

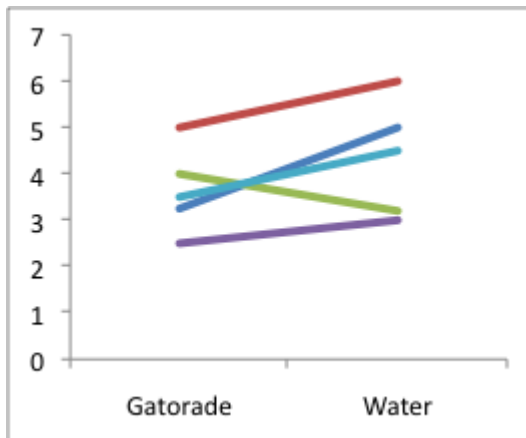


Is the difference between control and treated likely to be significant?

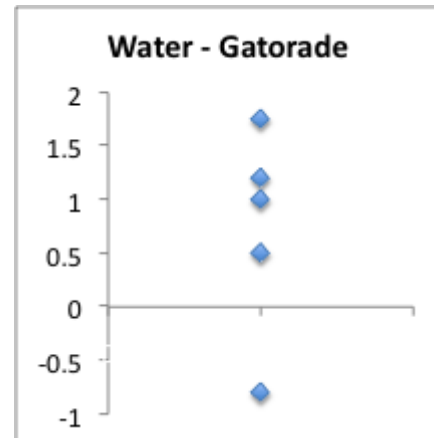
Estimate: Control mean =
Treated mean =
SEM =

How would you proceed to estimate significance?

Dependent 2-samples



Plotting the change in each subject:



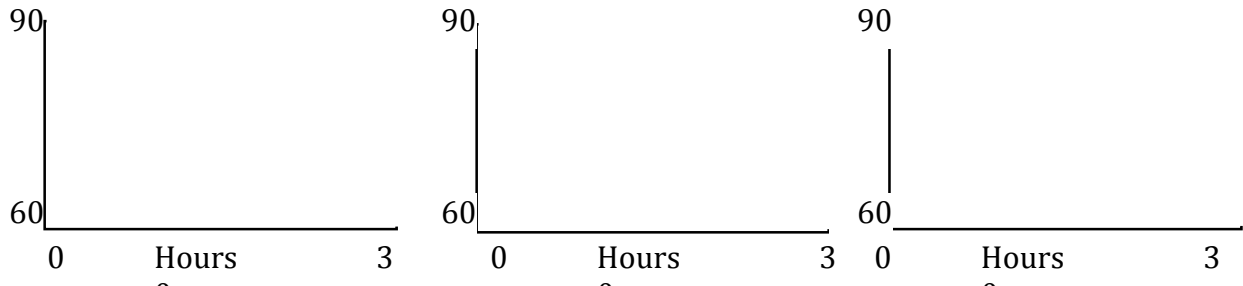
Plotting the difference values:

If the effect is reliable, what pattern emerges?

Is the effect likely to be significant?

Correlation

Each hour of studying adds 10 points to quiz grade. There are many other factors that strongly affect quiz grade. Which graph represents this?

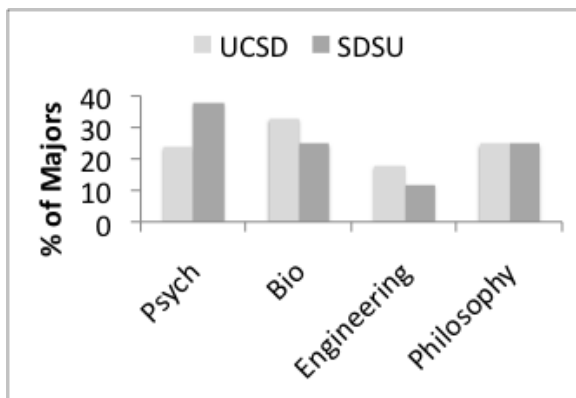


Variability is represented as -

Strength of the relationship is represented as -

Exchange rate is represented as -

Nominal Data



What is the statistic for determining if UCSD and SDSU are different?

Which factors, if any, are contributing to ____?

Objectives

Be able to select the right graph based on type of data (and vice versa)

Identify how variability is represented in graphs

Estimate whether effects are statistically significant from graphs