CAN YOU DO THESE?

1. Determine the null and alternative hypotheses given a problem
2. Calculate the test statistic (BY HAND **and** using technology) and p-value (by hand **or** using technology) for both proportions and means
	1. The test statistic for one-proportion z-tests is a little tricky with the p vs $\hat{p}$
3. Identify the appropriate test to use given a problem.
4. Identify when data is statistically significant given an alpha level.
5. Describe a Type I and Type II error.
6. Carry out a **complete** significance test for **means** AND **proportions**
	1. Step 1:
		1. Pop/Para
		2. Hypotheses
		3. Identify test
	2. Step 2: Conditions (be sure to study these for both types of test!!!!)
		1. SRS
		2. Normality \*\* Depends on test!!! \*\*
		3. Independence
	3. Step 3: Calculations
		1. Test statistics
		2. P-value
	4. Step 4: Conclusions
		1. IN CONTEXT
		2. Reference alpha value if given (or if you choose one)
		3. INCLUDE COMMENT ON P-VALUE!!!!!
		4. Make a real conclusion about the data
7. Recognized a paired t-test and carry out a one sample t-test for the differences!
	1. Your parameter in these cases is µfirst case - µsecond case
8. Construct a confidence interval for means and proportions.
	1. If you have already done steps 1 and 2 for a hypothesis test you do not need to repeat them for a confidence interval on the same data.