Classroom Activity 9	Math 113	Name :	
10 pts	Intro to Applied Stats		

Materials Needed:

None.

Instructions:

Is there a difference between the self-esteem of men and women? Do NOT put your name on the quiz sheet, this should remain anonymous. The self-esteem quiz is a shortened version of one available online at http://www.circle-of-grace.com/self_esteem_quiz.htm.

- 1. Take the self-esteem quiz at the end of this sheet, score it, and give it to the instructor who will read the results back to the class.
- 2. Record the self-esteem scores for each gender in the tables below.

Ma	ales		Females			

Test the claim that there is no difference in the self-esteems of men and women.

- 3. The male and female results are (independent / dependent).
- 4. Write the original claim symbolically.
- 5. The original claim is the (null / alternative) hypothesis.

6.	Write the null and alternative hypotheses:					
	H_0 :					
	H_1 :					
7.	This is a (left tai	l / right tail / two tail)	test.			
8.	The level of significance is $\alpha = \underline{\hspace{1cm}}$.					
9.	The degrees of freedom is					
10.	The critical value(s) is/are					
11.	Summarize the o	lata				
		Sample Size	Mean	St. Dev		
	Males					
	Females					
	Difference					
12.	The test statistic	is				
13.	The probability value is					
14.	The 95% confidence interval is < $\mu_m - \mu_f$ <					
15.	The test statistic (does / does not) lie in the critical region.					
16.	The p-value is (less / greater) than the significance level.					
17.	The confidence interval (does / does not) contained the claimed difference of 0.					
18.	The decision is to (reject / retain) the null hypothesis.					
19.	There (is / is not) enough evidence to (reject / support) the claim that there is a difference in the self-esteems of men and women.					

Do NOT put your name on this sheet. Circle your gender in the box to the right.

Answer the questions on this sheet honestly by checking one box for each question.

Gender:	Male	Female
Self-Esteem S	core:	

	Always	Often	Occasionally	Never
When I look in the mirror, I like what I see				
I find it easy to interact socially at parties				
I am able to stand up for myself				
I am able to say no to people asking favors				
I take time for myself				
I can forgive myself for making mistakes				
My personal relationships are fulfilling				
I am able to handle crises in my life				
I like my job				
When someone criticizes me, I can examine it logically, and not take every word to heart if it is not true				

When you are done answering the questions, give yourself 3 points for each "always", 2 points for each "often", 1 point for each "occasionally", and 0 points for each "never". Total the points and write the score in the box at top of the page.