Name:_____ Math 130 Day 19 In Class Worksheet

Date: Section 11.1: Hypothesis Tests for 2 Population Proportions

1) In order to figure out if PCC or Rio Hondo has better students, Greg the stats teacher performed an experiment in Fall 2011. He taught 2 stats classes at each school and gave identical exams, quizzes, and homework in all 4 classes. Of the 87 students Greg started with at PCC, 51 passed the class. Of the 75 students Greg started with at Rio Hondo, 33 passed the class. Perform the appropriate test at the $\alpha = 0.04$ significance level to test the claim that the percentage of students who can pass Greg's stats class at PCC is the same as the percentage of students who can pass Greg's stats class at Rio Hondo.

a) Use the P-value method

b) Use the rejection region method

2) In order to study the relationship between owning a pet and wearing eyeglasses, 50 Rio Hondo students were polled and asked 2 questions: 1) “Do you own a pet?” and 2) “Do you wear eyeglasses?”. The results are in the contingency table below. Perform the appropriate test to determine if the percentage of all Rio Hondo students that own a pet is the same as the percentage of all Rio Hondo students that wear eyeglasses at the 0.07 significance level.

		Do you own a pet?	
		Yes	No
Do you wear eyeglasses?	Yes	13	8
	No	19	10

a) Use the P-value method
b) Use the rejection region method