Instructions: *Answer each question using the two-way table below. Each question that pertains to a hypothesis test must include: H_0 & H_1 using correct notation, critical value &/or test statistics (work too) represented on a picture which also denotes alpha, decision, and correctly written conclusion.*

1. Based on the following 2 way table, answer the questions. The data represents the results from a survey of 89 students at Foothill & Cañada College who will or believe they will (if they were to vote) vote for Obama. The results are from a survey conducted by Professor Butterworth during the Fall 2012 term (and padded a little). The questions summarized are "What are the concerns facing our nation that you feel President Obama is most suited to address?" and "Which of the concerns facing our nation do you feel is most important to you?"

Obama's Ability in Area of:

	Economy	Environ	Health	Total
Economy	21	7	13	41
Environment	7	10	8	25
Health	9	6	8	23
Total	37	23	29	89

Respondent's Concerns

1. At the 90% confidence level, test the hypothesis that there is a difference between how people's concerns and those that they feel Obama is qualified to address.

2. Was 1) a test of independence or homogeneity?

3. Are there any violations to the assumptions for a test of independence/homogeneity in this data?

4. Show the computation of the expected value for Obama's Econ and Respondent's Health.

5.	Show the computation of the Obama's Econ and Respondent's Health box for the test statistic.

6.	I believe that 55% of the population is concerned with Economy, while 25% is concerned with health care and only 20% is concerned with the Environment.

	Economy	Health	Environ	Total
Obama's Ability	41	23	25	89

a)	Give the hypotheses for this test.		b)	Give the CV

d)	What is the expected value for the number of people concerned with the Economy? Health? Environ?		e)	Show the computation for the TS

f)	What is the decision?

g)	Is the test in 6) a test of independence, homogeneity or goodness of fit?