Lecture Chapter 11 Math 15 Jones Name_____

Perform the indicated goodness–of–fit test.

1) You roll a die 48 times with the following results.

Number	1	2	3	4	5	6
Frequency	14	4	2	1	12	15

Use a significance level of 0.05 to test the claim that the die is fair.

Solve the problem.

2) A study about determining the confidence that people had in the police ask respondents to say whether they had a great deal of confidence , some confidence or little or no confidence in police. The following table shows the responces split by Gender. Does the evidence suggest that the genders have different levels of confidence in the police.

	Great Deal	Some	little or none
Men	115	56	29
Women	175	94	31

Use a 0.05 significance level to test the claim that confience in police is independent of gender.

a) State the null and alternate hypothosis. Graph and shade the critical region and find the critical value.

b) Add the Matrix expected values above and find the Test Statistic

c) State the conclution of this hypothosis test.

3) Recent evidence suggest that obesity rates are dependent on the number of sugar or juice sweetend drinks that are consumed each day. A researcher wishes to test this claim and finds the results are shown below.

	< 1	2	> 3
Not obese	98	49	101
Obese	22	87	179

Use a 0.05 significance level to test the claim that the proportion of children who are obese is the same for all three categories.

a) State the null and alternate hypothosis.

b) Graph and shade the critical region.

c) Find the Matrix expected values, the Test Statistic, the Critical Value.

d) State the conclution of this hypothosis test.