

## Homework 14

Name \_\_\_\_\_

Consider the following table from the SDA archive at [csa.berkeley.edu](http://csa.berkeley.edu):7502.

Is Premarital Sex Wrong?					
Religion	<i>Always</i>	<i>Almost Always</i>	<i>Sometimes</i>	<i>Never</i>	<i>Total</i>
Protestant	355	117	227	384	1083
Catholic	62	37	120	226	445
Jewish	0	3	14	34	51
None	20	13	45	147	225
Other	15	13	23	40	91
<i>Total</i>	452	183	429	831	1895

1. Is there a significant difference between the proportion of Protestants who think premarital sex is never wrong and the proportion of Catholics who think premarital sex is never wrong?

a.) State the null and alternative hypotheses.

b.) State your conclusion and justify it with a confidence interval or p-value.

2. Is there a significant difference between the proportion of Protestants who think premarital sex is always wrong and the proportion of Catholics who think premarital sex is always wrong?

a.) State the null and alternative hypotheses.

b.) State your conclusion and justify it with a confidence interval or p-value.

3. Using Minitab, conduct a chi square test for the whole table.

a.) State the null and alternative hypotheses.

b.) State your conclusion and justify it with a critical value or p-value.