Hypothesis Tests, Worksheet #7   Name _____

Time magazine reported the result of a telephone poll of 800 adult Americans. The question posed of the Americans who were surveyed was: "Should the federal tax on cigarettes be raised to pay for health care reform?" The results of the survey were:

	Non-Smokers	Smokers
Sample size	605	195
"yes"	351	41

Is there sufficient evidence at the α = 0.05 level, say, to conclude that the two populations — smokers and non-smokers — differ significantly with respect to their opinions?

1. State the Type of Hypothesis or the TI calculator function to be used (and any settings):

2. State the Null and Alternative Hypotheses:
    H_0:

    H_a:

3. List all the data entered into your calculator to find the test statistic, or state the formula used if solving by hand.

4. Provide the output of the calculator. If solving by hand, find the test statistic and convert this value to a P-value using your calculator or the table.

5. Graph the critical values and the test statistic on the normal distribution.

6. What is your conclusion based on the critical values/test statistic, or the significance levels/p-values? Do you reject the null or fail to reject the null?

7. Restate your conclusion in the context of the problem (circle your choice):

There IS/IS NOT sufficient evidence that smokers and non-smokers ANSWER/DO NOT ANSWER the question "Should the federal tax on cigarettes be raised to pay for health care reform?" the same way.