

Name: \_\_\_\_\_

### INFERENCE FOR PROPORTION: TAPE #23

The Bureau of Labor Statistics takes a large sample each month to determine certain information related to the work force.

1. Approximately how many households are sampled? How many people does this constitute?

Households:

People:

2. An example in the video had a sample of  $n = 2000$  in which  $x = 140$  (the number of unemployed). What was the confidence interval? Was this interval narrow enough for the Bureau of Labor Statistics?

Interval:

Narrow enough?

A small town in Massachusetts had a high incidence of childhood leukemia, perinatal death, birth defects, and childhood disorders. Part of the town drank water from wells "G" and "H".

3. In a telephone sample, two sample proportions were discovered. What were the two sample proportions?

Sample 1: Drank the water  $\hat{P}_1 =$

Sample 2: Did not drink water  $\hat{P}_2 =$

4. What was the confidence interval for the difference between the two groups and what did this interval suggest?

In 1692 in Salem, Massachusetts, the community seemed to "go mad" and go on a spree of witch hangings.

5. What were the facts related to the geographic conditions surrounding the accused and the accusers?

6. There was an example comparing the number of hangings of men versus women. What were the null and alternative hypotheses? What was the conclusion (i.e. Reject or Fail to reject)?

$H_0$ :

$H_1$ :

Conclusion: