

Table Number: _____

Group Name: _____

Group Members: _____

Tests of Significance: Means CHILDREN'S TV WATCHING

In 1999, Stanford University researchers conducted a study on children's television viewing. At the beginning of the study, parents of third- and fourth-grade students at two public elementary schools in San Jose were asked to report how many hours of television the child watched in a typical week. The 198 responses had a mean of 15.41 hours and a standard deviation of 14.16 hours.

Conduct a test of whether or not these sample data provide evidence at the 0.05 significance level for concluding that third- and fourth-grade children watch an average of more than two hours of television **per day**. (This would be 14 hours per week.) Include all components of a hypothesis test and explain what each component reveals.

Who are the subjects of the study? _____

What is the sample?

What is the population?

What is the variable we are measuring?

What is the parameter we are concerned about, a proportion or a mean?

State your Hypotheses here:

H_0 :

H_a :

Check the conditions for a t -test here:

Find the test statistic, t , and write it here: _____ (Be sure to show work below)

Find the p-value using technology and write it here: _____

Reject or not reject H_0 ? Explain.

Interpret your conclusion:

If you had used a .10 significance level, would your conclusion be different? Explain.