

**Example 1:**

A college president says, “99% of the alumni support my firing of Coach Boggs.” You contact an SRS of 200 of the college’s 15,000 living alumni and find that 76 of them support firing the coach.

Describe the population and explain in words what the **parameter of interest** is..

Give the numerical value of  $\hat{p}$  that estimates  $p$ . \_\_\_\_\_

Find a 90% confidence interval for the true proportion of those alumni in favor of firing the coach.

Is there evidence at the 5% significance level that the alumni are in favor of firing the coach?

**Example 2**

In a recent year, 73% of first-year college students responding to a national survey identified “being very well-off financially” as an important personal goal. A state university finds that 132 of an SRS of 200 of its first-year students say that this goal is important. Give a 95% confidence interval for the proportion of all first-year students at the university who would identify being well-off as an important personal goal.

Is there good evidence that the proportion of all first year students at this university who think being very well-off is important differs from the national value, 73%?