**STAT 477/577 – Class Activities**

**Module 1 – Section 5**

**Confidence Intervals for the Population Proportion**

A start-up company is about to market a new computer printer. It decides to gamble by purchasing commercials during the Super Bowl. The company is hoping the name recognition will be worth the high cost of the commercials. The day after the game, a pollster contacts 420 randomly selected adults and finds that 181 of them know this company makes printers. Find and interpret a 95% confidence interval for the proportion of the population that recognizes this start-up company makes printers.

p̂ = 181/420 Plug into CI Normal Approx Method

95% confidence interval for the proportion of the population that recognizes the start up company makes printers is given by the interval (0.383, 0.475). This means we are 95% confident that the true population lies between 38.3% and 47.5%