1) A company that produces light bulbs is concerned about the distribution of the life expectancy of the bulbs. The company takes a simple random sample of 81 bulbs 2 (L. Parometer: The overage number and computes the sample mean to be 950 hours per bulb.

a. Check the conditions to see if you can use a normal distribution?

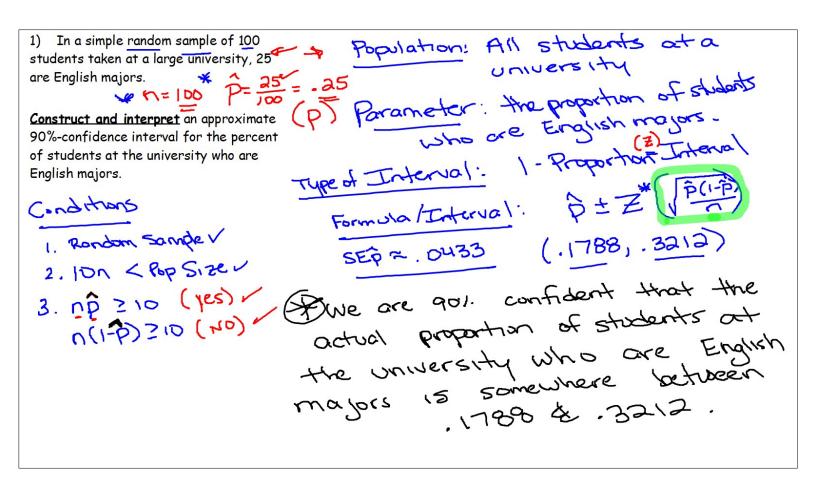
b. Construct a 95% confidence

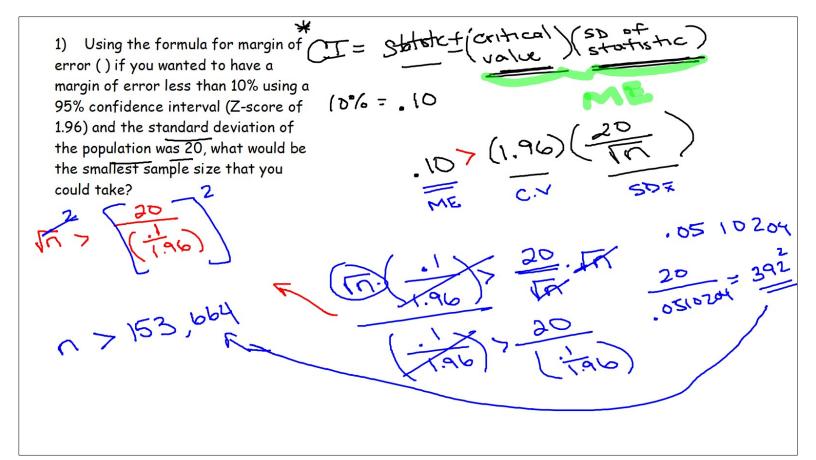
b. Construct a 95% confidence

conditions the unknown mean life expectancy assuming that the population standard deviation is 30 hours.

Therefore we are 951. confidence

The overage number number and the company is somewhere between and the co





- 1) The <u>actual time</u> it takes to cook a 25 pound turkey is a <u>normal</u> random variable with a mean of 5.4 hours and a standard deviation of 0.7 hours.
- a) Given that an average of 5.1 hours was found for a sample of 50 turkeys, calculate and interpret a 90% confidence interval for the average cooking time of a 25 pound turkey.
- b) Is the parameter that you are trying to estimate in (b) actually in the interval? What is the parameter?

gorameter (4)

X = 5.1 5.263 5.47

We are 90% confident

that the average cooking

time for a 25 pound

turkey is somewhere

between 4.937 & 5.263

hows.