Exercises from previous years' midterms

2008 #1

You conduct a survey among 400 residents of your city about their electricity consumption. The results show electricity consumption per household to vary from 5,500 kWh to 60,000 kWh with mean value 10,656 kWh and standard deviation 4,200 kWh. Construct a 95% confidence interval for the average electricity consumption per household in your city.

2012 #1

In a poll of 1000 persons, you find that 44% of the respondents state that they are in favor of a land tax. Build a 95% confidence interval for the percentage of the population that is in favor of the land tax.