Epilepsy is a group of neurological diseases that are characterized by seizures. While most seizures are short-lived and, relatively, harmless to the patient, violent seizures can result in bruises, falls, head injuries (with subsequent bleeding in the brain) or breathing problems. In an effort to control seizures among epilepsy patients, doctors developed the drug “Progabide” with the goal of ultimately decreasing the number of seizures experienced among patients. To test their drug, researchers randomly divided 59 patients into two group (a placebo and Progabide group). The Epilepsy.txt dataset contains the data on the number of seizures (Seizures) experienced by the patients over an 8 week period along with each patients age (age) and drug status (progabide).

Using the above data, answer the following questions:

0. After the data were collected, one patient, who had an abnormally high number of seizures, was diagnosed with a condition not treatable with Progabide. Prior to your analysis, identify the patient and remove the observation from the dataset.

1. Controlling for age, does the drug Progabide significantly reduce the number of seizures in patients? If so, by how much?

2. Does the patient age significantly affect the number of seizures in patients? If so, how much?

3. For a patient aged 19 on the drug, what is the average number of seizures? Provide a measure of uncertainty in your answer.