

Math 180 Handout #2
Groat's Disease

Groat's disease is fatal if left untreated. There is a drug treatment and a surgery option. Patients who take the drug have a 50% chance of survival. Surgery results in death in 10% of patients, succeeds in 40% of cases, and otherwise leaves the patients significantly weakened. It is also possible to take the drug after surgery, in which case 25% of patients make a complete recovery and the rest die. The patients weakened by surgery who do not take the drug have 10% chance of survival. What are the chances of survival for a person with Groat's disease?