Test 2 – You have 18 minutes to do the test.



The incidence rate of a rare characteristic in a large population is estimated to be one in 100,000. Consider a population of 200,000 people.

- (i) Find the probability that at least one person has the rare characteristic.
- (ii) Suppose that one person with the rare characteristic has been found in the population. Find the probability that there is at least one other person with the rare characteristic.
- (iii) Suppose that two people with the rare characteristic have been found. Find the probability that there are no others with the rare characteristic in the population.