



4. Assume that the population of Canada is 30 million. The disease Fibonitis afflicts 1 in 100 people. There is a test for Fibonitis which is correct 99% of the time. Suppose the test is given to all Canadians. Calculate the following numbers:

- (1) The number of people with the disease.
- (2) The number of people with the disease who will test negative.
- (3) The number of people with the disease who will test positive.
- (4) The number of people without the disease.
- (5) The number of people without the disease who will test positive.
- (6) The number of people without the disease who will test negative.

5. Suppose you test positive for Fibonitis. What is the probability that you actually have Fibonitis? (Hint: it is not 95%. Use some of your answers from the previous problem. If you have done the previous problem correctly, you should not need a calculator.)