**HW 4: Bayes Rule – Jordan Henstrom – October 4th 2018**

**Part 1:**

1. Table 1:

|  |  |
| --- | --- |
| **State** | **Prior Probability** |
| Colorectal Cancer | 0.003 |
| ~Colorectal Cancer | 0.997 |

1. Table 2:

|  |  |  |
| --- | --- | --- |
| **State** | **Observable** | **Conditional Probability** |
| Colorectal Cancer | Hemoccult | (0.003)(0.50) |
| ~Colorectal Cancer | Hemoccult | (0.997)(0.03) |
| Colorectal Cancer | ~Hemoccult | (0.003)(0.50) |
| ~Colorectal Cancer | ~Hemoccult | (0.997)(0.97) |

1. Whether or not someone tested positive for Hemoccult.

**Part 2:**