**1. Combining, Bagging and Random Forests**

1a. All three doctors correct = 0.8^3 = 0.512

At least two doctors correct = 0.8^2 = 0.64

Thus, the probability that the group is correct using majority voting is 3 \* (0.2\*0.8\*0.8) + 0.8^2 = 0.896

1b. We did not find a direct formula, see answer c. for the code implementation.

1c. See the file “majority.py”

1d.