

Assignment # 3 Quantitative Thinking in the Life Sciences (Assigned on September 12th. Due on September 19th)

Part 1: Probability experiment

Specifically, given the scenario:

Three cards are in a hat. The three cards are as described below:

- Black on one side, red on the other side
- Black on both sides
- Red on both sides

Design and test an experiment that will answer the following question:

- If you draw a card randomly from the three cards and look at one side, what is the probability that the other side is the same color?
 - e.g., if you draw a card and see a red side, what is the probability that the other side will be red?

The assignment is to detail your experiment in a manuscript format:

That is, introduce the puzzle and question. Develop or state a hypothesis. Describe the methods that you have developed to test that hypothesis. Describe and discuss the results of your experiment.

Part 2 Chapter 3 R Code

Run through the *Chapter 3: Sept 12th R Code* found under the courses tab:

<http://www.uvm.edu/~scmerril/Courses.html>

Turn in your code (remember to annotate!) and results as part of this assignment