A.

The first approach I did was to simulate 1000000 seasons with a python script to see how many of those would have resulted in GS never having consecutive losses. This was done by basically generating a season signature of 82 random numbers between 0-1 and then marking anything over .8 as a loss with anything <= .8 a win. After that, we scanned through and checked to see if any losses came back to back. According to my script, that value comes out to somewhere in the range of 0.0588 - 0.0589. So we can call the precision of that calculation to be 0.059 or 5.9% likelihood that given an 80% win likelihood, GS goes without consecutive losses for the whole season.

We also used a derived estimation equation that can be found [here](#) to manually calculate the approximated probability which gave us the answer of 5.9% as well. You can find all this code in the py file included in this zip called nba.py

B.

Given the math, I would not agree with those fans who thought that GS could avoid consecutive losses. Interestingly though, there are things that the data ignores such as the psychology of a bounce back performance by a good team among other things. We were interested as well by [this post](#) which basically highlights how humans have an inherent bias towards consecutivity thinking it probably does not happen as much as it could in the real world with true randomness.

C.

Using our existing method of simulation, we used an efficient binary search to slide the likelihood of winning param around until we converged on a value right around 90.6 or 91% likelihood of winning if you wanted a >= 50% chance that GS would make it through the entirety of the season without catching consecutive losses.