Bertrand Paradox

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July 7, 2017

In the exercise:

http://gtribello.github.io/mathNET/geometric-probability.html

you learnt about the Bertrand paradox and how probabilities are not well defined in the mthod that produces the random variable is not clearly defined. In doing this project you should revisit this problem but this time you shoudl write a python notebook to generate a larger of random variables. In your report discuss the number of random variables that you have to generate in order to determine that the difference in the estimate of the probability that you obtain when you use the two different methods comes about because of a systematic difference in the distributions that you are sampling from. In other words, how many random variables do you have to generate in order to be confident that the differences in the sample means that you obtain is not simply a consequence of the random error in the experiment.