Quiz 18

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This quiz does not count towards your grade. It exists to simply gauge your understanding. Treat this as though it were a portion of your midterm or final exam. In this quiz, we will walk through identifying identifying random variables.

1   Identifying Random Variables

1. Paul and Nathan thoroughly enjoy oranges; however, Nathan doesn't like peeling oranges. Everytime Paul finishes peeling an orange, Nathan will with probability p successfully steal Paul's peeled orange. If Paul peels n oranges, how many oranges will he eat successfully?

2. Angie goes to the music building daily to practice singing. Each day, she chooses one of n pieces at random. Given some $m < n$ of the pieces are arias, let us impose an absolute ordering on these arias. If Angie practices for k days, how many times will Angie practice all arias in sequential order, without repeating an aria? (Note that this means Angie will necessarily spend m days, practicing one aria a day, to finish one sequence.)