

Part 2) Theoretical Probability

Consider all of the possible game outcomes. (Not win-loss, but possible end conditions.) List them in the first column and calculate the theoretical probability of each outcome. Then change that to a percentage and predict how many times that outcome would be expected out of fifty plays. Finally, assign a payout for each outcome.

Outcome	Theoretical Probability Calculation	Theoretical Probability	Theoretical Percent	Out of 50	Payout

Calculate the *predicted value* of a single play of the game based on the theoretical probability. Show your work.

Based on this calculation, how much would you predict to profit (as the game owner) over 50 plays?