

Yahtzee Strategy Guide

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1 Introduction

This is a guide to the statistically best way to play the game of Yahtzee. This is not a rule book or an instruction manual, so it will assume that you already know the rules of the game. I will try to focus on those aspects of optimal play that are not obvious. I will try to ensure that any advice of strategy I give is the statistical best, and I will calculate all probabilities using computer simulations. This is because mathematically calculating probabilities for the game of Yahtzee is not trivial, and I am no expert on game theory. Additionally, simulating turns of Yahtzee and random rolls gives a satisfactory degree of precision. The same holds true for strategies that are not obvious. I will test and compare different strategies using simulations. The source code for all simulations used can be found in the git repository linked at the end of this document.

2 Combinations

2.1 Upper Section

2.2 Lower Section

3 Picking What To Go For

4 Rolling Strategy

5 Zero Strategy