

Dice Roll Probabilities Made Easy

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Comparing different methods of rolling dice in terms of their results can be an exhausting exercise, especially if you are an approbatur-level mathematics drop-out student like me. Luckily Torben Mogensen has developed Troll, a language for describing dice roll mechanisms, as well as an interpreter which also calculates the probabilities between the different alternatives in the mechanics described.

Simply put, Troll handles every kind of dice, every kind of roll, (almost) every kind of mechanic. You name it, you can do it in Troll, and test it in the interpreter. The primary entities in Troll are rolls (2d6) and numbers ("4") which can be combined with all manner of arithmetical (-, +, *) and logical (<, largest etc.) operations. It also supports variables (d6*d6 is different than x=d6, x*x). You can also use if-then-else structures, functions, repetitions and the whole kitchen sink.

I cannot say enough praising words about this creation. It is exactly what one needs when designing an/or tweaking a game with dice roll based resolution. A classic. Anyone not using this should seriously stop anything they're doing right now and take a look. Torben Mogensen's page on Troll, with links to the interpreter and its manual.

A tiny disclaimer: You need to learn about arithmetical and logical operations a little bit to use Troll efficiently. If you can write code, you'll be ok. If you are a mathematician, you'll do ok. If you can do formal philosophical logical operations, you'll learn this very quickly. Otherwise, just take a look at the examples in the excellent manual.