# DTP-Math-Circle: Session 2—Probability

Sept 16 2022

## 9 Average score

You are playing a game (like Ludo) with a friend in which each of you takes turns tossing a die, with the following rule: If you get a six, you get to toss again, but in any case no one gets more than three consecutive tosses. If you don't get a six, it is your friend's turn to toss the die.

If you play the game for a very long time, what is the average score you expect to get (averaged over all your turns).