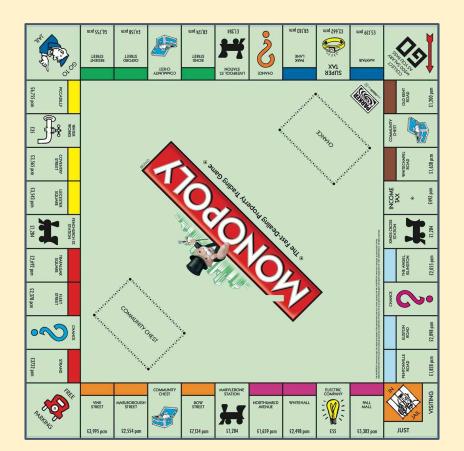
What's the best set of properties to own on a Monopoly board?



What's the best set of properties to own on a Monopoly board?

There is a statistically "best" answer to this question

And it all comes down to dice...

Probability looks at how likely things are to happen

If you throw 2 dice:

There is only one way to throw a 12 on two six sided dice



6 + 6

There are more ways to throw a seven:

$$1 + 6$$
, $2 + 5$, $3 + 4$, $4 + 3$, $5 + 2$, $6 + 1 = 6$ ways

How about 6?

How about 6?

$$1 + 5$$
, $2 + 4$, $3 + 3$, $4 + 2$, $5 + 1 = 5$ ways

How about a 5?

There is only one way to throw a 12 on two six sided dice

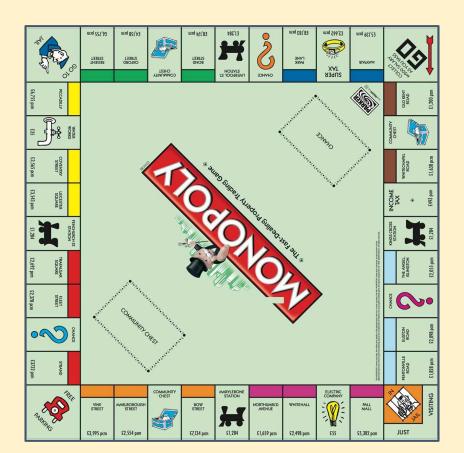
$$6 + 6$$

How many ways in total?

There are 36 ways in total

So the probability of throwing a 12 is 1 in 36

So, which set of properties is best to own in Monopoly?



The most likely space to end up on is Jail

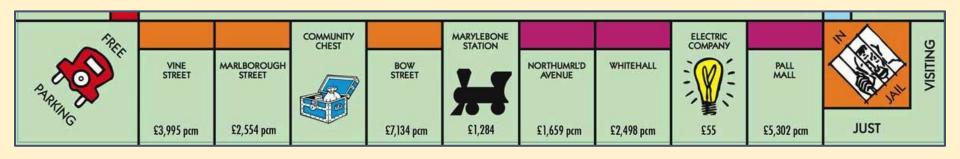
Because there are so many ways to end up there:

- Chance
- Community Chest
- Three doubles
- Go to Jail space
- Land on Just Visiting



You're four times more likely to be on jail than on any other given square on the board

After you leave jail it's much more likely you'll throw a 5, 6, 7, 8 or 9 (6 or 8 in particular) (26 out of 36 - 72% chance)



On average the orange set will earn about £25,000 a game. The dark blue (Mayfair) only £14,500. Green, Red and Yellow are also good sets - in that order. It's also cheaper to buy houses and hotels on Orange...

There is only one way to throw an 18 on three six sided dice

$$6 + 6 + 6$$

There are 216 ways in total

How about the probability of throwing 5 heads in a row when tossing a coin?

What are the odds of getting one head on a single throw?

How about on two throws?