
Part 7.6: Assumptions

When you are asked to justify the use of the binomial distribution you use the acronym FIST. If we look at the example of rolling the dice 6 times and getting a 3 a certain number of times:

Fixed number of trials – I roll the dice 6 times.

Independent – the result from each roll is independent from the other rolls.

Same – the probability of getting a 3 is always $\frac{1}{6}$.

Two Outcomes – there are two possible outcomes, it is either a three or it is not a three.

It is super important that you put all of the sections in context, rather than just stating what each letter means.