1. You have a bag containing three A and two E scrabble letters. You consider the sample space of drawing three letters from the bag without replacing them (i.e., each trial is dependent).
2. Now, we know the sample space, provide the probability that none of the outcomes in the sample will occur.
3. In your scrabble letter bag you have three A's and two E's. You take one letter out of the bag at a time, and return each letter to the bag before continuing with the following draw (i.e. each trial is independent). You draw three tiles in total. Lets calculate the probabilities of some of the possible outcomes!

* What is the probability of AAE?
* What is the probability of EAE?
* What is the probability of AAA or EEA?

1. In your scrabble letter bag you have three A's and two E's. You take one letter out of the bag at a time, and do not return each letter to the bag before continuing with the following draw (i.e. each trial is independent). You draw three tiles in total. Lets calculate the probabilities of some of the possible outcomes!

* What is the probability of AAE?
* What is the probability of EAE?
* What is the probability of AAA or EEA?

1. Independent intersecting events are two events that do not influence each other and can occur similtaneously. An example might be the outcome of rolling two dices. A and B are independent and intersect. Assume that the probability of A is 0.3 and B is 0.2.
2. Disjoint exhaustive events are mutually exclusive, so only one of the events can happen at a time.

A and B are disjoint and exhaustive. Assume that the probability of A is 0.33 and B is 0.2.

1. Now let us pretend that you have 6 alcohol drinkers and 4 non-alcohol drinkers in a room. Without knowing who who is, you pick three in sequence to take part in your study. Let us consider the probability of various outcomes.

* Calculate the probability that the First two people drink alcohol.
* Calculate the probability that the first- and third-person drink alcohol.
* Calculate the complement of the probability that none of them drink alcohol.

1. You are picking flowers from a garden. The garden contains flowers of varying colors, including flowers that are completely blue, flowers that are completely pink, and also flowers that are both colours. The probability of picking a flower that is at least partly blue is 0.4 and the probability of picking a flower that is at least partly pink is 0.2. Let's think about some probabilities!. Calculate the probability of picking a flower that is blue, pink or both? Assume, that the even are independent.