

**Belief and probability****Rules for manipulating probability**

Reading: Rules for manipulating probability
10 min



Video: Addition rules of probability
6 min



Video: Multiplication rules of probability
5 min



Video: Conditional probability, Random Variables and Experiments
8 min



Practice Quiz: Week 2 Manipulating Probability Practice
5 questions



Practice Quiz: Week 2 Manipulating Probability Graded Quiz
7 questions

Introduction to distributions**Estimation using MoM and MLE****Decisions, loss and priors****More on Priors**

Rules for manipulating probability

Now that we know what probability is, we need to have some rules for manipulating it. These rules fall into two categories:

- Rules of addition: the or rules

https://www.varsitytutors.com/hotmath/hotmath_help/topics/rule-of-probability

- Rules of multiplication: the and rules

https://www.varsitytutors.com/hotmath/hotmath_help/topics/rule-of-probability

As part of the rules, we gain the ideas of independence and conditional probability. As we will see, conditional probability amounts to changing the frame of reference from all possible events to only those that have occurred given some other thing has occurred. See the Wikipedia for https://en.wikipedia.org/wiki/Conditional_probability.

For the videos, please refer to Jupyter Notebook: Fundamentals of manipulating probability

✓ Complete

