

## Chi Square

### Prerequisites

[Distributions](#), [Areas of Normal Distributions](#), [Standard Normal Distribution](#)

- A. [Chi Square Distribution](#)
- B. [One-Way Tables](#)
- C. [Testing Distributions Demo](#)
- D. [Contingency Tables](#)
- E. [2 x 2 Table Simulation](#)
- F. [Exercises](#)
- G. [PDF Files](#) (in .zip archive)

Chi Square is a distribution that has proven to be particularly useful in statistics. The first section describes the basics of this distribution. The following two sections cover the most common statistical tests that make use of the Chi Square distribution. The section "One-Way Tables" shows how to use the Chi Square Distribution to test the difference between theoretically expected and observed frequencies. The section "Contingency Tables" shows how to use Chi Square to test the association between two nominal variables. This use of Chi Square is so common that it is often referred to as the "Chi Square Test."