

Module 1: Basics and Common Functions



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Functions help to study the relationship between two or more variables. They are the basic quantitative tool used to visualize, analyze, and interpret these relationships. Studying functions is the first step in developing analytics skills for mathematical modeling. In this module, we develop the concept of a function and review important algebraic operations on functions used later in this course. We will also study the important features, like domain, range, and end behavior of graphs.

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Learning Objectives

- Define a single and multivariable function
- Find domain and ranges of common functions
- Use proper notation when describing key features of a single or multivariable function
- Evaluate and graph piecewise functions
- Use R to make and graph functions
- Create new functions from old by composition.

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