

Functional equations are useful in the experimental sciences because they offer a tool for narrowing the possible models for a phenomenon. A model can be formulated by one or more not very restrictive functional equations, which when paired with an empirical or logical constraint of a general character, lead - via functional equation techniques -- to precise quantitative relationships. The article reviews various applications of functional equations in some areas of the behavioral sciences such as sensory psychology (psychophysics), utility theory under uncertainty, and aggregation of inputs and outputs in an economic or social context. We also provide enough basic material on functional equations to make this review self contained.