Probability Mass Functions

1 Why

todo

2 Definition

A **probability mass function** is a real-valued function from a set of outcomes which is non-negative and whose sum over of results over the set of outcomes is one.

2.1 Notation

Let A be a set of outcomes and let R be the set of real numbers. Let $p : \Omega \to R$ be such that

- $p(a) > 0$ for each $a \in A$ and

- $\sum_{a \in A} p(a) = 1$