

ENTROPY

Why

Definition

The entropy of a distribution is the expectation of the negative logarithm of the distribution under the distribution.

Notation

Let A be a finite set. Let $p:A\to \mathbf{R}$ be a distribution. The entropy of p is

$$-\sum_{a\in A} p(a)\log(p(a)).$$

We denote the entropy of p by H(p).

