



Absolute Value

1 Why

We want a notion of distance between elements of the real line.

2 Definition

We define a function mapping a real number to its length from zero.

2.1 Notation

Let R denote the set of real numbers. We denote the absolute value of a real number $a \in R$ by $|a|$. Thus $|\cdot| : R \rightarrow R$ can be viewed as a real-valued function on the real numbers which is nonnegative.