



Interval Length

1 Why

Toward defining the length of a subset of real numbers, we start by defining the length of an interval.

2 Definition

The *length* of an interval is the difference of its endpoints: the larger less the smaller.

3 Notation

Let a, b be real numbers which satisfy the relation $a < b$. The length of (a, b) , $[a, b]$ $[a, b)$ and $(a, b]$ is, in each case, $b - a$.

For example, the length of the interval $(0, 1)$ is one.