

Answer on Question #53049 – Math – Real Analysis

A number set has no supremum or it has a supremum which is infinity . does the two statement same ?

Solution

We often have a convention that a set with no upper bound, such as the positive real numbers, has a supremum of $+\infty$, and a set with no lower bound has an infimum of $-\infty$. In this sense every set has a supremum and an infimum, although it may not have a minimum or a maximum.