Supremum and infimum.

The formal definition is : If , we say M is an upper bound for S if

So if , M could equal 5 or anything bigger (like a googol)

The supremum is the least upper bound of S. written as or

Here’s the more formal way of writing it:

Let M be an upper bound and .M is the supremum or least upper bound if

Assignement 7 and assignement 8 had many questions on this topic. I god 100% on each. Also look at the test: I answered the questions related to this correctly as well, so you can trust the assignemetns and my test.