Breaking News, II

I can see that worrying about infinity is causing unnecessary confusion. Recall that I once wrote, “Mathematics is difficult enough without ambiguous statements!” So for removing ambiguity, from now on, any issue of limit points of a set or a sequence in \( \mathbb{R} \) shall exclude \( \pm \infty \) as possibilities. Just real numbers.

We should know by now that \( +\infty \) is not a real number. Could it possibly be one? Suppose it were. If you accept that we decided awhile back how \( \mathbb{R} \) is a field, we would have had to assign a value to \( +\infty + 1 \). The feeling is that

\[ +\infty + 1 = +\infty; \]

but then, the cancellation law for addition would give \( 1 = 0 \). Are you convinced?

In sum, questions and statements about “going to infinity” will be made separately. (This issue came up already in Calc I.)