

REAL COMPLETENESS

Why

Is the set of real numbers a complete ordered field (in the sense of $\mathsf{Complete}$ Fields?

Main Result

Proposition 1. $(\mathbf{R}, +, \cdot, <)$ is a complete ordered field.¹

Proof. The supremum of a set of nonempty real numbers bounded from above R is $\cup R$.

¹The account will appear in future editions.

