

Exercises

3.124 [07N] Prerequisites: [07C], [07D], [07F], [07K].

Let X be a totally ordered set. Show that the following two are equivalent.

- Every $A \subseteq X$ non-empty bounded from above and from below admits supremum and infimum.
- Each non-empty interval $I \subseteq X$ falls in one of the categories seen in [07D].

Solution 1. [07P]