

Compactness in Metric Spaces

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Compactness in Metric Spaces [Munkres 4345]

Theorem. The Following are Equivalent for a Metric X :

1. X is compact.
2. X is "limit-point-compact".
3. X is "sequentially compact".
4. X is "totally bounded" & "satisfies Lebesgue's Lemma".
5. X is totally bounded & "complete".

Quoted phrases
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