

# Most continuous functions are nowhere differentiable

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The topic of this note is simply to show the Baire category theorem (BCT), which we state now.

**Theorem 0.1** (Baire, Hausdorff). Let  $(X, d)$  be a complete metric space,  $\{U_n\}_{n \geq 1}$  be a sequence of dense open subsets of  $X$ . Then the intersection of all the  $U_n$  is dense.

*Proof.*

□

## The End

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