



Math for the people, by the people.

sequentially continuous

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Let X, Y be topological spaces. Then a $f : X \rightarrow Y$ is said to be *sequentially continuous* if for every convergent sequence $x_n \rightarrow x$ in X , $f(x_n) \rightarrow f(x)$ in Y .

Every continuous function is sequentially continuous, however the converse is true only in first-countable spaces (for example in metric spaces).