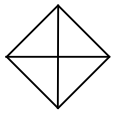

Real Uniform Continuity

1 Why

TODO

2 Definition

TODO

2.1 Notation

Let R denote the set of real numbers. Let $f : R \to R$. Then f is uniformly continuous at $x \in R$ if

$$(\forall \varepsilon > 0)(\exists \delta > 0)(\forall x \in R)(|x - y| < \delta \implies |f(x) - f(y)| < \varepsilon)$$

for all $y \in R$.