

## Metric Space Functions

## 1 Why

We want to talk about functions from one set with a metric into another set with a metric.

## 2 Definition

A function from a first metric space to a second metric space is a function from the first set to the second set.

## 2.1 Notation

Let (A, d) and (B, d') We denote that f is a function from the first metric space to the second metric space by  $f: (A, d) \to (B, d')$ .