



# 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  $f : (A, d) \rightarrow (B, d')$ .