Assignment 2

Cameron Fredrickson

Exercise 2

Every mathematical statement, such as $\sum_{n=1}^{\infty} 1/n^2 = \pi^2/6$, should be part of a sentence. Even equations need punctuation!

The notation $\lim_{x \to a} f(x) = L$ means that for every $\varepsilon > 0$ there is a $\delta > 0$ such that $|x - a| < \delta$ implies $|f(x) - L| < \varepsilon$. An incorrect way to typeset this definition is

$$\forall\, (\varepsilon > 0)\, \exists\, (\delta > 0)\, \ni\, (|x - a| < \delta \Longrightarrow |f(x) - L| < \varepsilon)\,.$$