Calculus I
Percise Definition of a Limit

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Chapter 1

1.1

Definition 1.1.1: Definition 2.4.1

Let f be a function defined on some open interval that contains the number a, except possivly a itself. Then we write

$$\lim_{x \to a} f(x) = L$$

if for every number $\epsilon > 0$ there is a number $\delta > 0$ such that if

$$0 < |x - a| < \delta$$

then

$$|f(x) - L| < \epsilon.$$