The Illustrated Limit

Read "The limit of f(x) as x approaches a is L." that is, f(x) heads to L as x goes to a

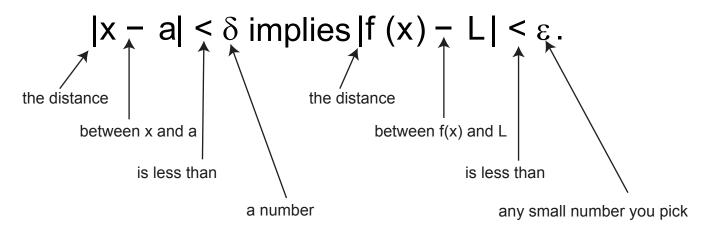
$$\lim_{x\to a} f(x) = L \text{ if and only if}$$

$$\text{for all } \epsilon > 0$$

$$\text{there exists a } \delta > 0$$

$$\text{such that}$$

no matter how small a number you pick you can find another number



that is, x is really close to a

that is f(x) is really close to L