## Quiz 1 Math 135 Winter 2016

## Name:

## Student Number:

Suppose $f$ is a real-valued function on the interval $[a, b]$ and suppose $a<c<b$. Suppose also that for every sequence of real numbers $c_{n} \in[a, b]$ satisfying

$$
\lim _{n \rightarrow \infty} c_{n}=c
$$

we have that

$$
\lim _{n \rightarrow \infty} f\left(c_{n}\right)=f(c)
$$

Prove that $f$ is continuous at $c$.

