

A Simple LaTeX Article

JaxEdit Project

January 12th, 2013

Contents

1 Long Introduction

We have the Cauchy-Schwarz inequality:

$$\left(\sum_{k=1}^n a_k b_k\right)^2 \leq \left(\sum_{k=1}^n a_k^2\right) \left(\sum_{k=1}^n b_k^2\right)$$

where a_k and b_k are real numbers, for any k .

2 Calculus

Theorem 1 *If we have the following conditions:*

1. $f(x)$ is continuous on $[a, b]$,
2. $f(x)$ is differentiable on (a, b) ,
3. $f(a)$ and $f(b)$ are equal,

Then there exists $\xi \in (a, b)$ such that $f'(\xi) = 0$.