



S.O.S. Mathematics CyberBoard

Your Resource for mathematics help on the web!

Logout [[helmut](#)] 0 new messages

FAQ Search Members User Control Panel

Last visit was: Thu, 07 May 2020 07:07

It is currently Thu, 07 May 2020 14:01

[View unanswered posts](#) | [View active topics](#)

[View unread posts](#) | [View new posts](#) | [View your posts](#)

[Board index](#) » [Math 3341](#) » [Chapter 4](#)

All times are UTC - 6 hours

4.2

Moderator: [helmut](#)

[[Moderator Control Panel](#)]

[new topic](#) [post reply](#) Page 1 of 1 [2 posts]

[Subscribe topic](#) | [Bookmark topic](#) | [Print view](#) | [E-mail friend](#)

[Previous topic](#) | [Next topic](#)

Author

Message

bribiescase

Post subject: 4.2

Posted: Thu, 07 May 2020 11:50

[offline](#)

Math Cadet

Joined: Tue, 31 Mar 2020
15:10

Posts: 9

Let D be a set of all real numbers and $x_0 \in D$. Assume that x_0 is not an accumulation point of D .

Then we could say that x_0 is an isolated point of D .

Therefore, there exists a neighborhood (x_0, δ) of x_0 such that

$$N(x_0, \delta) \cap D = \{x_0\}$$

Consider, $f : D \rightarrow \mathbb{R}$ be a function.

Let $\varepsilon > 0$,

Then $|f_x - x_0| < \varepsilon$ holds for $x=x_0$

there exists a positive δ s.t. $|f_x - x_0| < \varepsilon$ for all $x \in N(x_0, \delta) \cap D$.

This proves that f is continuous at x_0

Top

[profile](#) [pm](#) [email](#)

[edit](#) [quote](#)

helmut

Post subject: Re: 4.2

Posted: Thu, 07 May 2020 14:01

[online](#)

Site Admin



Joined: Sat, 26 Apr 2003
15:14

Posts: 2275

Location: El Paso TX (USA)

Correct. 1 credit for Estefany.

The greater danger for most of us lies not in setting our aim too high and falling short; but in setting our aim too low, and achieving our mark. - Michelangelo Buonarroti

Top

[profile](#) [pm](#) [email](#)

[edit](#) [quote](#)

Display posts from previous: [All posts](#) ▼ Sort by [Post time](#) ▼ [Ascending](#) ▼ [Go](#)



[Board index](#) » [Math 3341](#) » [Chapter 4](#)

All times are UTC - 6 hours

Who is online

Users browsing this forum: [helmut](#)

Quick-mod tools:

You **can** post new topics in this forum
You **can** reply to topics in this forum
You **can** edit your posts in this forum
You **can** delete your posts in this forum

Search for:

Jump to:

[[Administration Control Panel](#)]

[Contact Us](#) | [S.O.S. Mathematics Homepage](#)
[Privacy Statement](#) | [Search the "old" CyberBoard](#)
824 users online during the last hour
Powered by [phpBB](#) © 2001, 2005-2017 phpBB Group.
Copyright © 1999-2017 MathMedics, LLC. All rights reserved.
Math Medics, LLC. - P.O. Box 12395 - El Paso TX 79913 - USA