## Homework # 4: A question received by e-mail

	From:       @163.com>         Date:       Sat, July 14, 2007 13:38         To:       "igor.podlubny@tuke.sk" <igor.podlubny@tuke.sk>         Priority:       Normal         Options:       View Full Header I View Printable Version I Download this as a file I View Mest</igor.podlubny@tuke.sk>	
ear Professor Ig My name is ngineering at Xi esearch interest ynchronization. quations□□ (New ttached in the e ind a method to Best wishes!	From Xi'an Jiaotong University, Xillan, Shannxi, P R China, my Yours sincerely From Xi'an Jiaotong University, Xillan, Shannxi, P R China Produbny, I and post system, and its control, Recently, I read your book of DEFractional Differential York: Academic Press), I have a question in my mind, which is ail. I have tried my best to prove it, but I still can not Yours sincerely From Xi'an Jiaotong University, Xillan, Shannxi, P R China	
achments:	Given the following fractional differential equation:	
<u>estion.pdf</u>	$\frac{d^{q}x}{dt^{q}} = -ax(t) + f(t)$ Where $a > 0$ , and $f(t)$ is a real function defined on R. <b>Conclusion:</b> if $f(t)$ is bounded on R, then $x(t)$ is also bounded on R. My question is whether this conclusion is right or not, if this conclusion is right, how to prove it	t?

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Dear Professor Io My name is engineering at Xi research interest synchronization. Equations□□ (New attached in the e find a method to Best wishes!	<pre>gor Podlubny,</pre>	Write your reply!	
Attachments:			
untitled-[1.2]	Given the following fractional differential equation:		
<u>question.pdf</u>	$\frac{d^q x}{dt^q} = -ax(t) + f(t)$		
	Where $a > 0$ , and $f(t)$ is a real function defined on R.		
<b>Conclusion:</b> if $f(t)$ is bounded on R, then $x(t)$ is also bounded on R.			
	My question is whether this conclusion is right or not, if this conc	lusion is right, how to prove it?	