

From: Wolfram Research <support@wolfram.com>
Subject: **The problem you reported has been fixed!**
Date: 24 May 2007 10:40:43 GMT-04:00
To: richardconnhenry@mac.com

Dear Richard Conn Henry,

On January 11, 2006 you sent us the following email reporting a problem you found in Mathematica. We appreciate the time you took to contact us.

One of our continuing objectives is to resolve even the smallest problems in Mathematica. In addition to our own large-scale testing effort, we rely on users like you to bring problems to our attention.

Vast developments and improvements in Mathematica 6 made it possible for us to resolve a considerable number of open issues, and I am pleased to tell you that the problem you reported was among them.

I encourage you to verify that the problem has been resolved by attempting to replicate it in Mathematica 6. Please let us know if you feel there is any remaining issue. If you do not yet have Mathematica 6, you can visit <http://www.wolfram.com/mathematica> for an overview of features. If you are interested in downloading a time-limited trial version, please send an email to support@wolfram.com with your current contact information. Please also include your product license number if you have your own copy of any version of Mathematica.

You can find additional information and educational resources about Mathematica 6 by visiting the following websites.

Free Online Seminars: <http://www.wolfram.com/weg/seminar.cgi>
Education and Training: <http://www.wolfram.com/weg>
The Demonstrations Project: <http://demonstrations.wolfram.com>

Thanks for your part in helping us support the worldwide computing community with the best possible technical software system. Please let us know if you have other feedback or suggestions.

Yours sincerely,

Roger Germundsson
Director, Research & Development
Wolfram Research, Inc.

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Thanks for your help. Under your guidance, I am focusing the concern more clearly.

In particular, I now attach a mma notebook which I ask you to do two things:

- a) copy it so you don't lose the result of running it with Mathematica 2.2.2 - a nice short result, and correct I might add!
- b) run it with Mathematica 5.2

I have had it running with Mathematic 5.2 myself now, for many hours with essentially NO result.

- 1.) Just using Simplify gave TimeConstraint violations...and it then quit.
- 2.) using Simplify[zm16, TimeConstraint->Infinity] has run for many hours now with no result
- 3.) using FullSimplify[zm16] has run for many hours now with no result.

Of course if any result should appear by tomorrow (Monday) morning, I'll let you know.

I can't produce any cleaner result than this: a long perfectly normal mathematic quantity, which 2.2.2 simplifies beautifully in some hours of work, and which 5.2 cannot simplify.

As I said before, someone "fixed" Simplify when 3.0 was created, and made an error. It is a serious embarrassment and it surely must be found and fixed.

If you get it reduced somehow with 5.2, let me know. I expect to update the web site to reflect my progress.

Dick Henry

On 15 Nov 2005, at 11:00, support@wolfram.com wrote:

-- Wolfram Research Technical Support --

This is a response to your email.
The reply to your question can be found at the bottom of this message.
Our classification number for this message is: [TS 31561]
Please give this number in any future correspondence related to this question. If you leave this number in the Subject: header in the form [TS 31561], it will automatically be reassigned to the original technician.

From: Richard Conn Henry <richardconnhenry@mac.com>
Date: Wed, 9 Nov 2005 14:21:48 -0500
Subject: "Simplify" has a serious problem
To: support@wolfram.com

Premier Service, L2533-2739

Hi Steve Wolfram,

I contacted you a few weeks ago about this, and got a nice reply which asked me to give a minimal example of the problem. (My email all got trashed accidentally shortly thereafter, so I don't know who replied). So I sort of have to start over.

Here is the essence of it:

I still have Mathematica 2.2.2 for the Mac, and it works just great (under Classic of course).

Why did I keep 2.2.2 after I got Mathematic 3.0 (so many years ago)? Because I discovered that Simplify[] in 3.0 did NOT WORK right - in particular, things I could reduce with 2.2.2 would not reduce with 3.0

I didn't fret too much, because I thought the problem would be

recognized and fixed. But, it still has not.

And Classic is going away with the adoption of Intel chips by Apple!

Anyway, Steve, it is surely an embarrassment that 2.2.2 is better than 5.2

When I emailed a few weeks ago, I directed you to my specially-created web site for this problem, which had the script which worked (when run with 2.2.2) and which failed (when run with 5.2).

Your assistant who replied felt the script was too complicated, and indeed it was. So I have now pared it down so there is only ONE failure of Simplify, at the end, AND the earlier sub-calculations all go pretty fast.

Even so, it takes 2.2.2 more than 12 hours to combine the terms in zm16. But, by gum, it does do it, and tests I have applied guarantee it is the right answer, too. It is a triumph! (I have no idea how Maple would do on this, I've never used it).

<http://henry.pha.jhu.edu/MathematicaSucks.html>

In the present version of my nasty ("Mathematica sucks", sorry about that!) web page, I do ALSO provide the RESULT that I get with each of 2.2.2 and 5.2 so you don't have to run the script unless you want to.

Now, that is all I can do about it. Whoever "improved" Simplify when the transition went from 2.2.2 to 3.0, screwed it up in some way. You know how Mathematica works; I do not. I can't fix it.

(Now not only does Mathematica NOT suck, it is a triumph of the human race and a joy to me. But this wart should, please, be removed from its nose!)

Cheers,

Dick

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To explore the Universe and search for life
To inspire the next generation of explorers
... as only NASA can.