

Kamke differential equations solved in Maple and Mathematica

Nasser M. Abbasi

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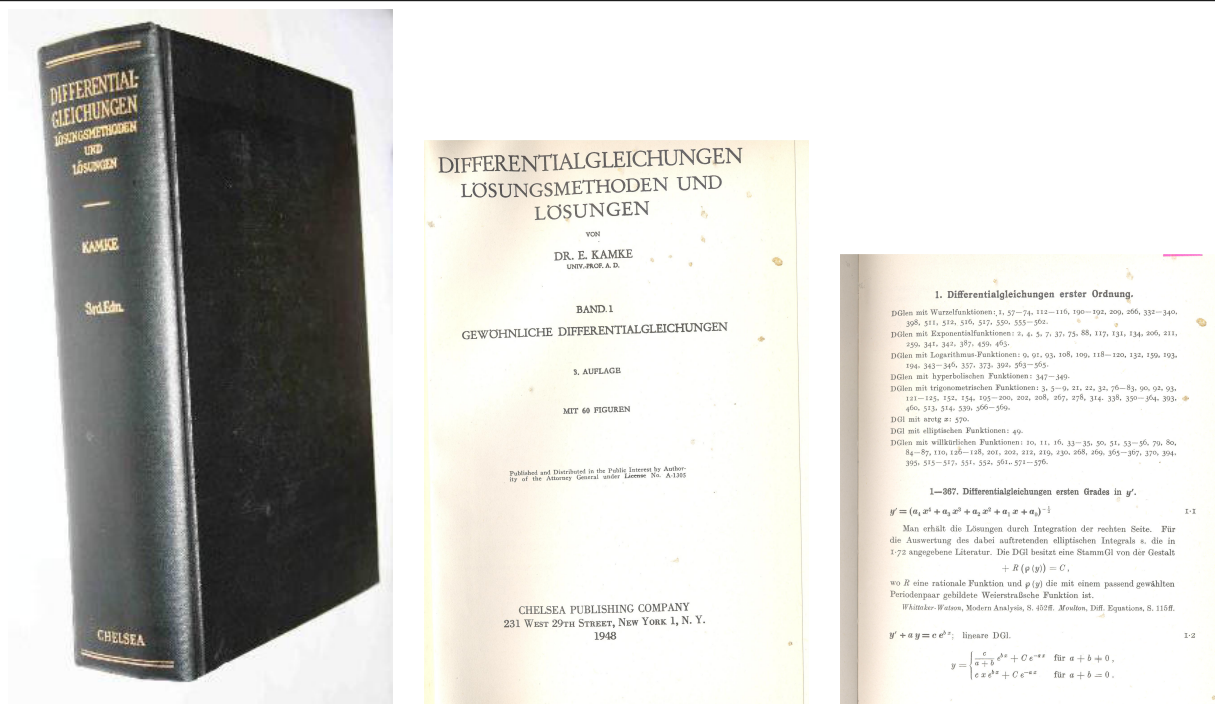
Compiled on February 5, 2024 at 1:52am

This page is no longer being updated. Please see this for the current version where Kamke ode's are now hosted.

date completed	report	Maple score	Mathematica score	notes
August 12, 2021	HTML	2021.1 (88.66%)	12.3.1 (88.04%)	5 minutes per problem. Adjusted scoring for Maple. ODSolStruc now counted as not solved.
May 20, 2021	HTML	2021 (91.86%)	12.3 (88.04%)	5 minutes per problem
April 28, 2020	HTML	2020 (91.96%)	12.1 (84.33%)	5 minutes per problem
April 20, 2019	HTML	2019 (92.11%)	12 (82.78%)	5 minutes per problem
April 16, 2018	HTML	2018.0 (92.01%)	11.3 (77.47%)	60 minutes per problem. Mathematica log file
2018.	HTML	2018 (91.96%)	11.3 (75.93%)	5 minutes.
Oct 27, 2017	HTML	2017.3 (91.96%)	11.2 (75.77%)	5 minutes.
2016	HTML	2016.1 (92.01%)	11 (74.48%)	5 minutes per problem.
Rebuild April 22, 2018	HTML	2016.1 (91.96%)	10.4 (77.22%)	5 minutes.
2016	HTML	2016.1 (91.96%)	10.4 (75.93%)	5 minutes.
2015	HTML	2015.2 (92.16%)	10.3.1 (75.98%)	5 minutes.
December 24, 2014.	HTML	18.01 (92.21%)	10.0 (79.74%)	The first 70 differential equations are also implemented in sage 6.2. No specific time out was used. This looks like the build script had some errors. I removed this from public web site. June 2014. Sage scored (56.52%)
2014	HTML	Maple 17	9.01	Not completed and kept for reference.

Introduction

his report contain 1940 ODE's taken from the book "Differential Gleichungen" by Kamke, 3rd edition, solved using Maple and Mathematica.



downloads

1. `mathematica_listing.txt` Current listing of Kamke differential equations in Mathematica syntax in plain text format.
2. `maple_listing.txt` Current listing of Kamke differential equations in Maple syntax in plain text format.
3. `sage_script.sage` Sage script used. Run as follows `sage sage_script.sage`