



SDI Review Form 1.6

Journal Name:	Asian Journal of Research in Computer Science
Manuscript Number:	Ms_AJRCOS_49505
Title of the Manuscript:	The first integrals of a second order ordinary differential equation and application
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments		
Minor REVISION comments	<p>The Lie symmetry method via the first integral method has been used to construct analytical solutions and existence and nonexistence theorems of solutions to second order ordinary differential equations. Certain applications from the evolution equations were considered as test problems to determine the travelling wave solutions through the presented method. The paper is interesting and would benefit many applied mathematicians working in differential equations and mathematical modeling.</p> <p>However, I have the following observations: 1. There are minor grammatical issues... see abstract: "a" second order ordinary differential equations... "a" should be removed.... I suggest the whole manuscript be checked thoroughly! 2. Just below Eq. (1), $abc \neq 0$ or $a \neq 0 \ b \neq 0 \ c \neq 0$? Same below Eq. (25)... etc 3. Finally, I suggest the following relevant papers be cited:</p> <p>i. AM Nass, Lie symmetry analysis and exact solutions of fractional ordinary differential equations with neutral delay, https://doi.org/10.1016/j.amc.2018.11.002, 2019, Applied Mathematics and Computation, 347, 370-380</p> <p>ii. AM Nass, K Mpungu, RI Nuruddeen, Group classification of the time fractional nonlinear Poisson equation, Mathematical Communications, 24(2019) 1-13</p> <p>iii. RI Nuruddeen, Aminu M Nass, Exact solitary wave solution for the fractional and classical GEW-Burgers equations: an application of Kudryashov method, Journal of Taibah University for Science, 12(3) 309-314, 2018.</p>	<p>Thank you very much for your positive comments and helpful suggestions for improving our paper. We have answered the questions point by point and revised our manuscript accordingly to your comments.</p> <p>We have checked the spelling and the grammar errors of the manuscript carefully.</p> <p>1. We have removed 'a'. 2. We think that $abc \neq 0$ is same as that $a \neq 0 \ b \neq 0 \ c \neq 0$ in Eq.(1). Correspondingly, That's the same thing for equation (25) . 3. We have add the three relevant papers in References.</p> <p>Thank you again for your comments.</p>
Optional/General comments	I suggest the paper be accepted after the raised minor observations are taken care of.	Thank you for your positive comments.

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	