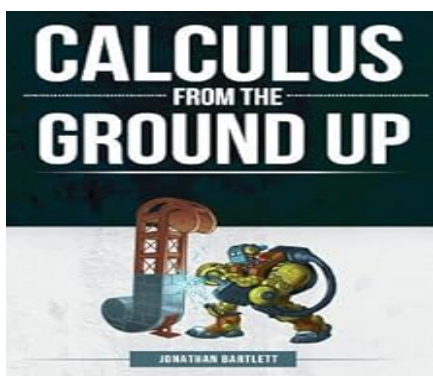


Calculus from the Ground Up By Jonathan Laine Bartlett In 2019 Bartlett and Khurshudyan published a paper titled Extending the Algebraic Manipulability of Differentials which he referenced in an online article in April of that year titled Is Standard Calculus Notation Wrong? The paper in essence casts doubt on the correctness of the higher derivative notation in calculus and then proposes an alternative. In the paper the authors give an example of the standard notation for higher derivatives apparently failing but they had failed to use the chain rule (one of the standard theorems of calculus) when it was clearly needed and they give no other examples of apparent failure. They could have claimed that it was not entirely clear that the chain rule was needed because there's no clear distinction between variables and functions however later in the paper they explain how Leibniz himself made that distinction... and thereby point to the flaw in their original example. One could ask - if the problem they claim to address was basically fake then why did they bother with the rest of it? And why would anyone else bother with it? How would one test a system with different independent variables? How could it be to quote Leibniz referred back to assignable quantities? Perhaps most importantly - what possible application could it have? But we can certainly answer their original question.



Potential buyers note - the author may not have an entirely objective perspective on calculus. After their dubious example they proceed to (so they claim) augment the standard notation to allow for the ambiguity (i. No standard calculus notation is not wrong - just make sure you have a consistent independent variable in your workings as everyone has been doing from the start. Apparently Bartlett talks about their system in an appendix of the book. Does he also say that it is (as far as we can tell) irrelevant and that standard calculus notation is perfectly fine? 458 Calculus from the Ground Up.

. This book was published in 2018.e. the easily avoidable ambiguity)