VCU - MATH 490 - Review of an interesting article

Brent Cody

February 13, 2018

1 Introduction

Give correct information about the author, date and article. Your introduction needs to capture the main point — was the article effective or not? It should introduce the specific topic you are reviewing, and indicate something about the subject matter. Include some indication as to why the subject is important and thus worth writing about. Identify the purpose of the article.

2 Summary

The summary section of a critical review should be very short. It is usually between a paragraph and a page, depending on the length of the article. The purpose of the summary is not to provide every single detail of the work, but rather to provide the reader with an overview of the main arguments and structure.

3 Analysis

Here is where you summarize your analysis and evaluation. The most important points, strengths and weaknesses of the article need to be mentioned here. This section is where the mathematical content is showcased. Did the organization of the material help? Which results did you like the most and what surprised you? Remember: this is not where you do a summary! This is also the section where you may have to provide your own examples or material from other sources that would go along with the topic of the article. For example, if you really liked the result of a theorem, you might want to demonstrate your understanding of it by providing your own example. However, never forget that your aim is to tell about the article not the whole subject matter.

Remember:

1. I should be able to understand your entire paper without consulting the article you read. This means you need to define every technical term that

you will use and build my (the reader's) intuition about the topic by giving simple examples, etc.

2. Use both in-line equations such as $x^2 - x = 0$ as well as centered equations like
$$(a - b)(c - d)(e - f)(g - h) = 0.$$

4 Conclusion

Sum up the most important points you want to make about the article. Restate your overall evaluation. Tell whether the article increase your understanding of the subject or not. Why? Why not? Mention question you were expecting to be answered by the article that were not answered. Finally would you recommend others to read the article? Why?

References

[1] Clarke, F., Ekeland, I.: Nonlinear oscillations and boundary-value problems for Hamiltonian systems. *Arch. Rat. Mech. Anal.* 78, 315–333 (1982)

[2] Clarke, F., Ekeland, I.: Solutions périodiques, du période donnée, des équations hamiltoniennes. *Note CRAS Paris* 287, 1013–1015 (1978)

[3] Michalek, R., Tarantello, G.: Subharmonic solutions with prescribed minimal period for nonautonomous Hamiltonian systems. *J. Diff. Eq.* 72, 28–55 (1988)

[4] Tarantello, G.: Subharmonic solutions for Hamiltonian systems via a p pseudoindex theory. *Annali di Matematica Pura* (to appear)

[5] Rabinowitz, P.: On subharmonic solutions of a Hamiltonian system. *Comm. Pure Appl. Math.* 33, 609–633 (1980)