

# A NOVEL PROOF OF POWER RULE IN CALCULUS

PETRO KOLOSOV

ABSTRACT. The power rule for derivatives, typically proven through the limit definition of derivative in conjunction with the Binomial theorem. In this manuscript we present an alternative approach to proving the power rule, by utilizing a certain polynomial identity, such that expresses the function's growth.

## CONTENTS

1. Introduction	1
2. Conclusions	1
References	2

## 1. INTRODUCTION

## 2. CONCLUSIONS

Conclusions of your manuscript.

---

*Date:* November 11, 2024.

2010 *Mathematics Subject Classification.* 26A24.

*Key words and phrases.* Calculus, Derivatives, Power rule, Binomial theorem, Differentiation.

Sources: <https://github.com/kolosovpetro/ANovelProofOfPowerRuleInCalculus>

REFERENCES

**Version:** Local-0.1.0

SOFTWARE DEVELOPER, DEVOPS ENGINEER

*Email address:* kolosovp94@gmail.com

*URL:* <https://kolosovpetro.github.io>