MATHEMATICS FOR SCIENCE STUDENTS

An open-source book

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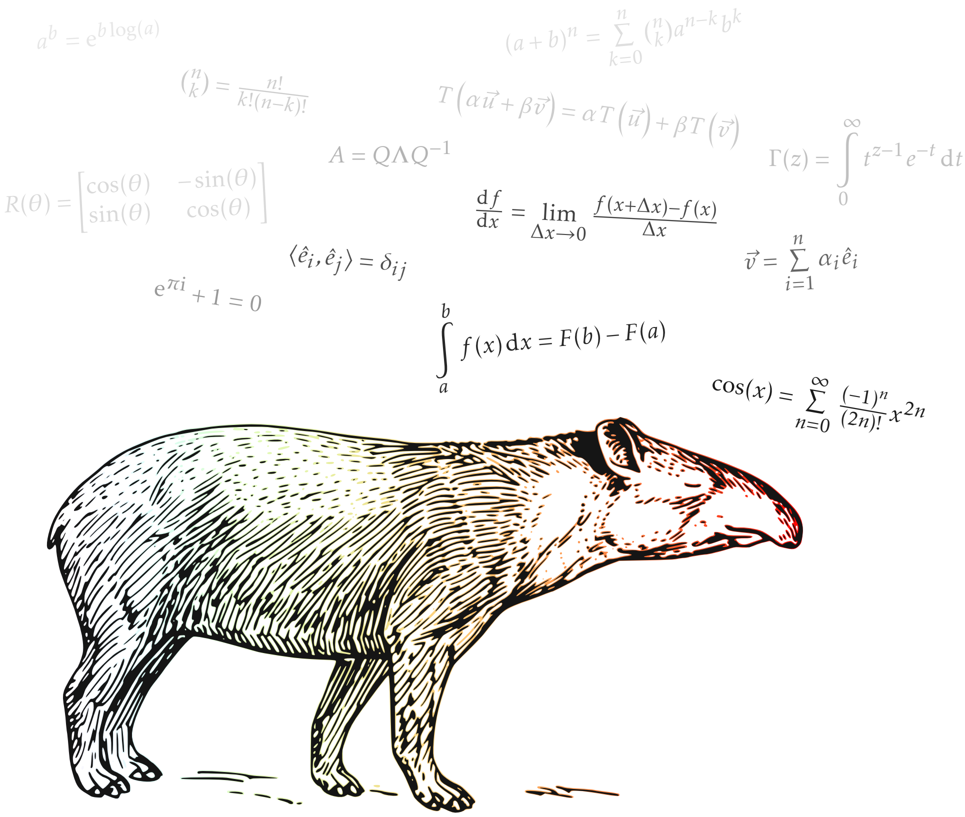
with contributions from others



PUBLISHED IN THE WILD

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HERE BE TABLE

CHAPTER 0

INTRODUCTION

In this chapter we introduce key concepts that will be used in later chapters. For this reason, unlike other chapters it contains many statements, sometimes given without thorough explanations or reasoning. While all of these statements are grounded in deep ideas and can be formulated in a rigorous manner, it is advised to first get an intuitive understanding of the ideas before diving into their more formal construction.

Note 0.1 In case you are already familiar with the topics

It is recommended for readers who are familiar with the topics to at least gloss over this chapter and make sure they know and understand all the concepts presented here.

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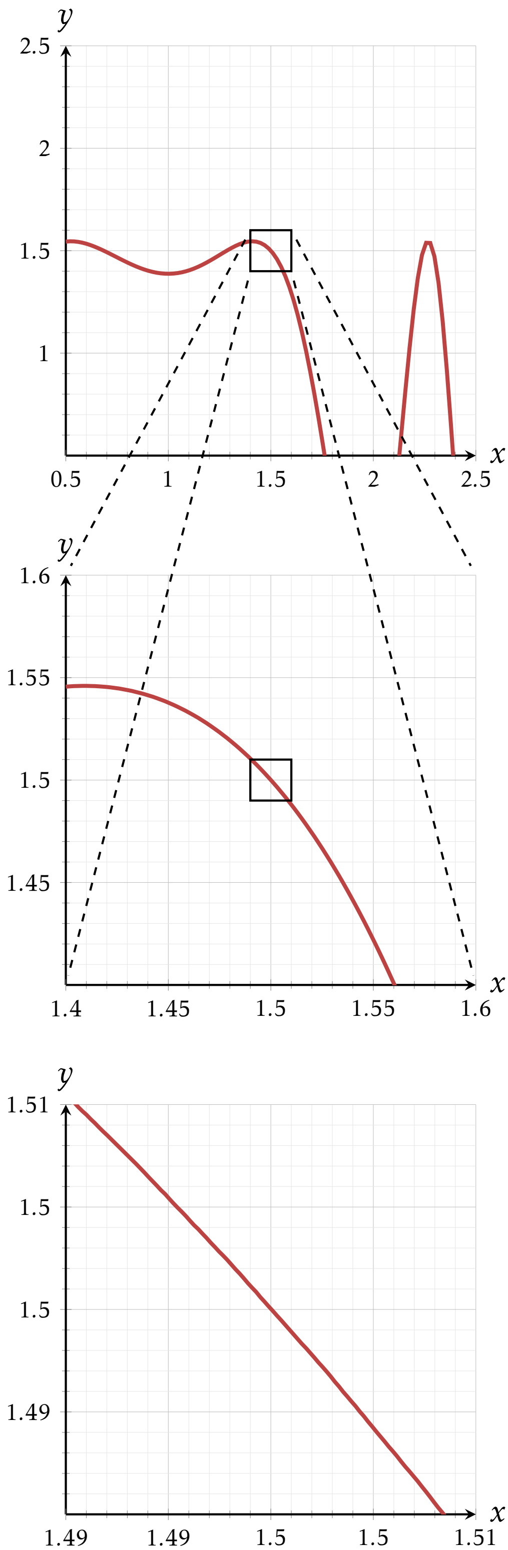
0.1 DERIVATIVES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2
1.5
1
0.5
1
1.5
2
2.5
x
y
1.6
1.55
1.5
1.45
1.4
1.45
1.5
1.55
1.6
x
y
1.51
1.5
1.5
1.49
1.49
1.49
1.5
1.5
1.51
x

Figure 0.1