

FREAKOMATICA
Mathematics from First Principles

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Preface

There are typical ways in which math books attempt to reach the audience.

1. Dull and Solving.

This is where the book only delivers the art of solving. With no care of how a audience can apply the knowledge which is being acquired. The audience is presented with the formulas neccessary to accomplish a task without caring why it is necessary to know such task and how and why was such formula was arrived at.

2. All fun Math.

This is the approach of Math facts only books. They present facts with so much assumption that you know math or with little care of whether you need to solve as you can read through the text without any use of a calculator. They are both enjoyable and exciting as they remove all the evil that is seen with math. They do a great job of showing what a beautiful land math is. All the fiction you can ever get from math land. Hence they are not used in a classroom setting where you are required to solve something so that a teacher can evaluate or for self practice.

3. Application Math.

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All These are not bad approaches they mostly achieve the purpose they are for.

This book tryies to blend in all these approaches mainly so that the book can be taken serious enough for use in classroom setting and so that it demystifyies math and make it fun for self learning. It presumes the reader has no prior experience with math and wants to teach from first principles. Ofcourse this is almost impossible goal.

The goal is to demonstrate that almost anyone can contribute to this wonderful universe of math. Develop it, question it and use it in any way possible. The goal is to show that seemingly so obvious ideas were not obvious before and looking into obvious things brought in advancement in human knowledge in alternative way of doing things.

The most notorious challenge to be solved:

1. people learn differently
2. classrooms go inline with Syllabus
3. Back and fourth of math
4. difficult to mix things

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Introduction

Chapter 1

Why Mathematics

1.1 Bonus:

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Chapter 2

Branches of Mathematics

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Things and Objects

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Let this be that

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Operations all together

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Chapter 14

Where to go from here

