
MATH3140: ABSTRACT ALGEBRA I

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TEXTBOOK: TBD

UNIVERSITY OF COLORADO BOULDER

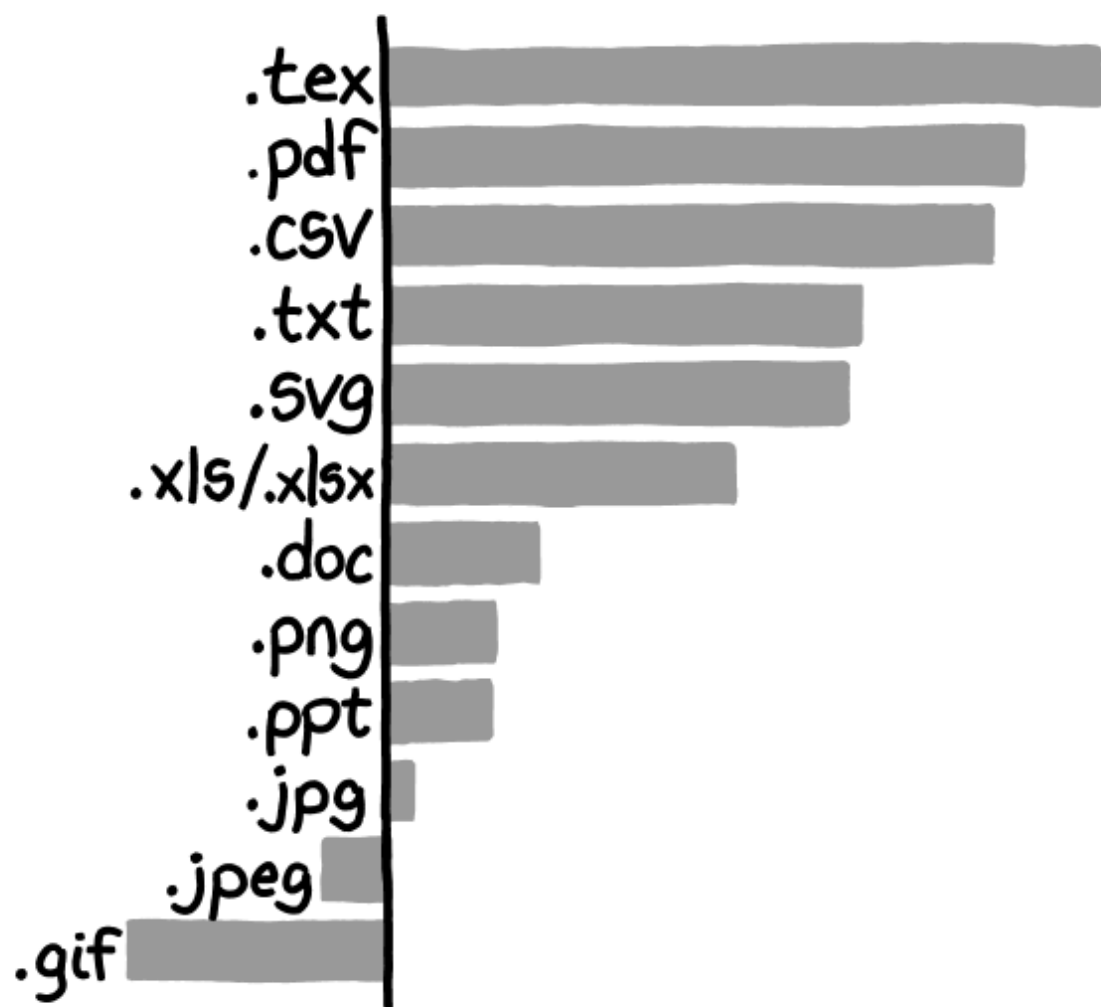


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Contents

| | |
|---|------------|
| Preface | iii |
| 1 CH1 TEMP TBD | 1 |
| 1.1 Lecture 1: June 5, 2023 | 1 |
| Abstract Algebra I as a Word Cloud | 2 |
| Appendices | |
| List of Theorems and Definitions | 4 |

Draft: June 5, 2023

Preface

To the interested reader,

This document is a compilation of lecture notes taken during the Summer 2023 semester for MATH3140: Abstract Algebra I at the University of Colorado Boulder. The course used *Ordinary Differential Equations*¹ by Morris Tenenbaum and Harry Pollard as its primary text. Supplemental texts included Martin Braun's *Differential Equations and Their Applications*². As such, many theorems, definitions, and content may be quoted or derived from the aforementioned books. This course was taught by Michael Noyes, Ph. D.

The author would like to provide the following resources for students currently taking a differential equations course:

1. Martin Braun's *Differential Equations and Their Applications*.
2. Paul's Online Notes for Differential Equations
3. MIT OpenCourseWare Differential Equations Lectures From Spring 2006.
4. 3Blue1Brown's *Overview of Differential Equations*.

While much effort has been put in to remove typos and mathematical errors, it is very likely that some errors, both small and large, are present. Please keep in mind that the author wrote this resource during the first summer of his undergraduate studies. If an error needs to be resolved, please contact Adithya Bhaskara at adithya.bhaskara@colorado.edu.

Best Regards,
Adithya Bhaskara

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¹Tenenbaum, M., & Pollard, H. (1985). *Ordinary Differential Equations*. Dover Publications.

²Braun, M. (1993). *Differential Equations and Their Applications an Introduction to Applied Mathematics*. Springer.

1

CH1 TEMP TBD

1.1 Lecture 1: June 5, 2023

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Appendices

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Chapter ??, PAGE ??

DEFINITION ??, PAGE ?? *Ordinary Differential Equations*

DEFINITION ??, PAGE ?? *Order of a Differential Equation*

DEFINITION ??, PAGE ?? *Explicit Solutions to Ordinary Differential Equations*

DEFINITION ??, PAGE ?? *Implicit Functions*

DEFINITION ??, PAGE ?? *Implicit Solutions to Ordinary Differential Equations*

DEFINITION ??, PAGE ?? *n-Parameter Families of Solutions*

DEFINITION ??, PAGE ?? *Particular Solutions of Differential Equations*

DEFINITION ??, PAGE ?? *General Solutions of Differential Equations*

DEFINITION ??, PAGE ?? *Initial Conditions*

Chapter ??, PAGE ??

DEFINITION ??, PAGE ?? *Differentials*

THEOREM ??, PAGE ?? *A Useful Lemma for a Property of Differentials*

THEOREM ??, PAGE ?? *A Useful Property of Differentials*

THEOREM ??, PAGE ?? *The Chain Rule for Differentials*

DEFINITION ??, PAGE ?? *Homogeneous Functions*

DEFINITION ??, PAGE ?? *Differential Equations With Homogeneous Coefficients*

THEOREM ??, PAGE ?? *Differential Equations With Homogeneous Coefficients are Separable*

DEFINITION ??, PAGE ?? *Simply Connected Regions*

DEFINITION ??, PAGE ?? *Exact Differential Equations*

THEOREM ??, PAGE ?? *The Existence of a Potential*

DEFINITION ??, PAGE ?? *Integrating Factors*

THEOREM ??, PAGE ?? *Sameness of Solutions*

Chapter ??, PAGE ??

DEFINITION ??, PAGE ?? *Linear Ordinary Differential Equations*

THEOREM ??, PAGE ?? *Linear Independence*

THEOREM ??, PAGE ?? *Existence of Solutions to nth Order Linear Differential Equations (I)*

THEOREM ??, PAGE ?? *Existence of Solutions to nth Order Linear Differential Equations (II)*

THEOREM ??, PAGE ?? *Uniqueness of Solutions to nth Order Linear Differential Equations*

DEFINITION ??, PAGE ?? *Wronskians*

THEOREM ??, PAGE ?? *Wronskians Determine Linear Independence**

THEOREM ??, PAGE ?? *Wronskians are Necessary and Sufficient in Some Cases*

DEFINITION ??, PAGE ?? *Linear Differential Equations With Constant Coefficients*

DEFINITION ??, PAGE ?? *Homogeneous Linear Differential Equations*

THEOREM ??, PAGE ?? *Decomposing a Solution of a Linear Differential Equation*

DEFINITION ??, PAGE ?? *Characteristic Polynomials*

THEOREM ??, PAGE ?? *Finding Solutions With Characteristic Polynomials*

THEOREM ??, PAGE ?? *Euler's Formula*

THEOREM ??, PAGE ?? *Cases of the Method of Undetermined Coefficients*

THEOREM ??, PAGE ?? *Cramer's Rule*

THEOREM ??, PAGE ?? *A Useful Lemma for Reduction of Order*

THEOREM ??, PAGE ?? *Reduction of Order, in the $n = 2$ Case*

DEFINITION ??, PAGE ?? *Improper Integrals*

DEFINITION ??, PAGE ?? *The Laplace Transform*

THEOREM ??, PAGE ?? *The Linearity of the Laplace Transform*

THEOREM ??, PAGE ?? *The Laplace of a Derivative*

THEOREM ??, PAGE ?? *The Injectivity of the Laplace Transform (Lerch's Theorem)*

DEFINITION ??, PAGE ?? *The Inverse Laplace Transform*

DEFINITION ??, PAGE ?? *Differential Operators*

THEOREM ??, PAGE ?? *Properties of Generalized Differential Operators*

DEFINITION ??, PAGE ?? *Polynomial Differential Operators*

THEOREM ??, PAGE ?? *Polynomial Operators Satisfy Compositional Commutativity*

THEOREM ??, PAGE ?? *Factorization of Polynomial Operators*

Chapter ??, PAGE ??

DEFINITION ??, PAGE ?? *Systems of First Order Differential Equations*

DEFINITION ??, PAGE ?? *Linear Systems of First Order Differential Equations*

DEFINITION ??, PAGE ?? *Reduced Linear Systems of First Order Differential Equations*

THEOREM ??, PAGE ?? *Number of Solutions to Reduced Systems*

THEOREM ??, PAGE ?? *Solution of a First Order Linear Differential Equation*

THEOREM ??, PAGE ?? *Reducing an nth Order Linear Equation Into an n Dimensional System*

Chapter ??, PAGE ??

DEFINITION ??, PAGE ?? *Power Series*

DEFINITION ??, PAGE ?? *Radius of Convergence*

DEFINITION ??, PAGE ?? *Valid Power Series Representation*

DEFINITION ??, PAGE ?? *Absolute Convergence*

THEOREM ??, PAGE ?? *A Useful Lemma for Absolute Convergence*

THEOREM ??, PAGE ?? *Uniqueness of Valid Power Series Expansions*

THEOREM ??, PAGE ?? *Taylor Series Remainder*

DEFINITION ??, PAGE ?? *Analytic Functions*

THEOREM ??, PAGE ?? *Analytic Implies Existence of Power Series General Solution*