

33B: Notes

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1 Introduction

Differential equations are just equations involving the derivatives of functions. There are partial differential equations - differential equations involving partial derivatives of functions, and ordinary differential equations - differential equations which just involve ordinary derivatives.

We can also classify differential equations by the order of the derivatives they involve:

Definition 1 (Order). *The order of a differential equation is just the order of the highest order derivative that it involves.*

2 Chapter 2

2.1 Section 1