ERASMUS UNIVERSITY ROTTERDAM
Literature suggestion for Entrance examination Mathematics level 1
for International Bachelor in Communication and Media

The following chapters from "Essential Mathematics for Economic Analysis" by Knut Sydsaeter and Peter Hammond (ISBN 0-273-65543-4) could serve as a basis for preparing the level 1 entrance examination in mathematics of Erasmus University. Note that the summary below does not exactly match the examination topics! (For example: the topics Combinatorics and Probability are not covered in this book.)

- **Chapter 1: Introductory Topics I: Algebra**

- **Chapter 2: Introductory Topics II: Equations**

- **Chapter 4: Functions of One Variable**

- **Chapter 5: Properties of Functions**

  Only the following paragraphs:

  - 5.1: Shifting Graphs
  - 5.2: New functions from old
  - 5.3: Inverse Functions

- **Chapter 6: Differentiation**

  Only the following paragraphs (rules of differentiation and application of these rules only; other items may be skipped):

  - 6.1: Slopes of Curves
  - 6.3: Increasing and Decreasing Functions
  - 6.6: Simple Rules for Differentiation
  - 6.7: Sums, Products, and Quotients
  - 6.8: Chain Rule
  - 6.10: Exponential Functions
  - 6.11: Logarithmic Functions

- **Chapter 10: Financial Topics: Interest Rates and Present Value**

  Only the following paragraphs:

  - 10.1: Interest Periods and Effective Rates
  - 10.3: Present Value