

Entrance Exam Mathematics

Topics

The overview below indicates the sections of the book 'Essential Mathematics for Economic Analysis', sixth edition, by Sydsaeter, Hammond, Strom, and Carvajal that should be studied for the entrance exam mathematics.

Chapter 2	§ 1, 2, 3, 4, 5, 6, 8
Chapter 3	§ 1, 3, 4, 6
Chapter 4	§ 1, 2, 3, 4, 6, 8, 9, 10
Chapter 5	§ 1, 2
Chapter 6	§ 1, 2, 3, 6, 7, 8, 10
Chapter 9	§ 1, 2, 6*

*Only the first-derivative test

The following overview refers to the sections of the fifth edition of the book.

Chapter 2	§ 1, 2, 3, 4, 5, 6
Chapter 3	§ 1, 3, 4, 6
Chapter 4	§ 1, 2, 3, 4, 6, 8, 9, 10
Chapter 5	§ 1, 2
Chapter 6	§ 1, 2, 3, 6, 7, 8, 10
Chapter 8	§ 1, 2, 6*

*Only the first-derivative test

Econometrics and Operations Research

Prospective students Econometrics and Operations Research should study the following additional theory:

- Trigonometry:
 - Determining values of sines, cosines, and tangents (using a calculator, the input values can be given in degrees or in radians).
 - Solving (simple) equations with sines, cosines and/or tangents.
 - Differentiating functions with sines and cosines (combined with the other rules for differentiation).
- Absolute values (chapter 2; § 7).
- Limits (chapter 6; § 5).
- Higher order derivatives (chapter 6; § 9).
- Inflection points and convex/concave functions (chapter 8; § 2, 6).
- Integration (chapter 10; § 1, 2, 3).