Problems and Subject Areas

Problem s.n denotes the nth problem of Sections, and APs.n denotes the Advanced Project associated with Asssignment s.n, in the referenced articles. Problems that can be explored in more than one area of mathematics are listed in each subject area.

Precalculus

Microeconomics 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3 Intermediate Macroeconomics Theory 2.1, 2.3, AP2.3, 2.5, AP2.5, 2.6, AP2.6 Behavioral Economics 2.1, 2.2, 2.3, 2.4, 4.1, 4.2, 4.3, 4.4, 4.5, 5.1, 5.2, 5.4, 5.5, 5.6 The Portfolio Problem 2.1, 2.2, 2.3, 3.2, 3.3, 3.4, 3.5, 4.1, 4.2 Topics in Modern Finance 2.1, 2.2, 3.1, 3.2, 3.3, 4.1

Single-variable Calculus

Microeconomics 4.1, 4.2, 4.3 Intermediate Macroeconomics Theory 2.2, AP2.2, 2.6, AP2.6 Econometrics 4.1 The Portfolio Problem 2.3 Topics in Modern Finance 3.1, 3.2, 3.3, 4.2

Multivariable Calculus

Microeconomics 4.4
Intermediate Macroeconomics Theory A2.1, 2.4, AP2.4
Econometrics 2.1
The Portfolio Problem 3.1, 4.3
Topics in Modern Finance 3.4
Maximizing Profit with Production Constraints 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 5.1, 5.2

Linear Algebra

Closed Linear Systems 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.1, 3.2 Econometrics 2.2, 3.1 Topics in Modern Finance 3.5

Probability

Behavioral Economics 3.1, 3.2, 4.1, 4.2, 4.3, 4.4, 4.5

Statistics

Econometrics 4.2, 4.3, 4.4, 5.1, 5.2, 5.3 The Portfolio Problem 2.1, 2.2, 2.3 Topics in Modern Finance 2.1, 2.2, 3.1, 3.2, 3.3, 5.1, 6.1