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A Not-for-Profit University

Department of Electrical Engineering
School of Science and Engineering

EE563 Convex Optimization

TUTORIAL 1

Textbook: Convex Optimization – Boyd and Vandenberghe

Tutorial 1-1
　　Problem 2.7

Tutorial 1-2
　　Problem 2.9

Tutorial 1-3
　　Show that the solution set of linear matrix inequality (LMI) given by

$$x_1 A_1 + x_2 A_2 + \ldots + x_n A_n \preceq B, \quad A_i, B \in \mathbf{S}^m$$

　　is a convex set.

Tutorial 1-4
　　Problem 2.10(b)

Tutorial 1-5
　　Problem 2.24

Tutorial 1-6
　　Problem 2.32