Department of Engineering Cybernetics TTK4215 Adaptive Control Assignment 2

Problem 1

Problem 2.7 in Ioannou & Sun.

Problem 2

Problem 2.8 in Ioannou & Sun.

Problem 3

Problem 2.10 in Ioannou & Sun.

Hint: Check out page 50-51 in the book (some definitions from page 36-37 are used here).

Problem 4

Problem 3.3 in Ioannou & Sun.

Hint: Read the first pages of Section 3.3.1. For part b, Corollary 3.3.1 might come in handy..

Problem 5

Problem 3.13 in Ioannou & Sun.

Problem 6

Problem 3.17 in Ioannou & Sun.

Hint: See the proof of Theorem 3.5.2 in the book. Note that this uses Lemma 3.5.4 instead of 3.5.3, which is the one you should use.