Homework 5 for MATH 1260 Fall 2019

Due Tuesday October 22, 2019 Recommended Deadline: Thursday October 17, 2019

Reading: Chapter IV Sections 1-6

Turn in solutions to all problems. You may wish to do simpler problems—usually the first ones in a section—to master the reading.

IV.1: 1a, 2b, 4, 8

IV.2: 5

IV.3: 4, 5

IV.4: 2, 3

IV.5: 2, 3, 4

In Problem IV.3.5, Gamelin writes, "Show that this estimate is sharp, and that in fact there exist D and f(z) for which equality holds." He simply asking you to produce a D and f for which equality holds; this then implies that the inequality is sharp.