

HW1, due Wednesday, September 9

Math 404, Spring 2014

Patrick Brosnan, Instructor

Exercises from the Hoffman-Kunze: (16 points each) 1.2.2, 1.2.6, 1.3.5, 1.4.6, 1.5.4

1 (20 points). Let F denote the set of complex numbers of the form $a + bi\sqrt{7}$ with a, b rational. Show that F is a subfield of the field \mathbb{C} of complex numbers.