

MATH661: Homework 6

Issued: 11/11/15

Due: 11/18/15

Notation: K&C = Kincaid & Cheney textbook

1. K&C p.564, 8.5.1

2.a. K&C p.564, 8.5.3

2.b. K&C p.564, 8.5.4 (present boundary locus plot)

3. K&C p.564, 8.5.6

4.a. K&C, p.570, 8.6.5

4.b. K&C, p.570, 8.6.6

For the 4.a., 4.b: compute matrix eigenvalues, determine step size restriction for forward Euler, Adams-Bashforth of order 2

5.a. (Computational problem) K&C, p. 589, 8.8.1.

5.b. (Computational problem) K&C, p. 614, 8.12.2

EC2: K&C, p. 596, 8.10.1