

## Homework Assignment for Week 10

1. Section 4.2: Problems 5, 10, 12.
2. For section 4.2, problem 12, also show  $K_1 = 0$  alternatively by assuming the expansion

$$e = \left(\frac{2+h}{2-h}\right)^{\frac{1}{h}} + C_1 h^{p_1} + \dots$$

and find  $p_1$  numerically using  $N(h)$  with  $h = 0.02$  and  $0.01$ .

3. Section 4.3: Next week.
4. Section 4.4: Problems 7, 14, 23, 24, 26.

Problem 7 is a programming assignment. Make good use of the 'for' or 'do' loop in matlab/C, or the command 'sum' in matlab.