

HOMEWORK 6

Exercise 1. Solve exercises 14.1, 14.3, 14.4, and 14.12 from the textbook.

Exercise 2. Solve exercises 15.1, 15.3, and 15.6 from the textbook.

Do not use the integral test; use instead the dyadic criterion presented in class.

Exercise 3. Study the convergence of the series

$$\sum_{n \geq 2} \frac{n^{\ln n}}{(\ln n)^n} \quad \text{and} \quad \sum_{n \geq 2} \frac{1}{(\ln n)^{\ln n}}.$$