

Math 2142 Homework 7 Part 1: Due Friday March 23

Problem 1. Do the following problems from Exercises 10.16 in the textbook: 1, 2, 4, 5, 8.

Problem 2. Do the following problems from Exercises 10.20 in the textbook: 1, 2, 3, 6, 8.

Problem 3(a). Show that the series

$$\sum_{n=3}^{\infty} \frac{(-1)^n}{n \ln n}$$

converges conditionally.

3(b). Show that the series

$$\sum_{n=3}^{\infty} \frac{(-1)^n}{n(\ln n)^2}$$

converges absolutely.