

Discrete Structures and Theory- Spring 2023

Homework 7

Deadline: 14/04/2023

Exercise

a) (2 POINTS) Find a formula for $\frac{1}{1 \times 2} + \frac{1}{2 \times 3} + \dots + \frac{1}{n \times (n+1)}$ by examining the values of this expression for small values of n .

b) (5 POINTS) Prove the formula you conjectured in part (a) by mathematical induction.