

Exam 3 Math 361A Spring 2023

Due: Friday, 5 May

- Work all problems. Write concisely and clearly in complete sentences that incorporate equations. Typed work is appreciated. Use of LaTeX will receive a 2.5% bonus.
 - Submit to the class drop box.
 - Exercises are taken from the course text, *Introductory Analysis*.
 - *Ethic*: In completing this exam you can consult the text, other members of the class, and the instructor. The written work that you submit should be your own.
- 1) a) Suppose (a_k) is Cauchy. Prove that (a_k^2) is Cauchy.
 b) Show that the converse does not hold.
 - 2) Exercise 6.10
 - 3) Exercise 8.28
 - 4) Exercise 8.29
 - 5) Exercise 9.13
 - 6) Exercise 9.14