



COMPLEX VARIABLES  
SPRING 2020

ASSIGNMENT 11.2  
DUE APRIL 22

**Exercise 1.** Textbook exercise IV.6.2.

**Exercise 2.** Prove that if the series  $\sum_{k=0}^{\infty} a_k$  and  $\sum_{k=0}^{\infty} b_k$  both converge absolutely, then so does their Cauchy product. [*Suggestion:* Apply the theorem proven in class to the series  $\sum |a_k|$  and  $\sum |b_k|$ , and use the comparison test.]