

Assignment 6
Due Wednesday, March 11

Exercises:

Chapter 8: 12*, 13, 14*, 15*, 16, 17*

Remarks and hints:

8.12–14. Fourier series, via Parseval's Theorem or pointwise convergence, are one of the standard methods for evaluating sums of the general form $\sum_n n^{-s}$. Sometimes these can also be evaluated using the Residue Theorem of complex variables.

8.15. The Stone-Weierstrass Theorem tells us that if f is a continuous 2π -periodic function then there exists *some* sequence of trigonometric polynomials converging uniformly to f . Fejér's theorem identifies a *specific* sequence with this property.

*Turn in starred problems Wednesday 3/11.