

**Math 425 / AMCS 525
Assignment 7**

**Dr. DeTurck
Due Tuesday, March 29, 2016**

Topics for this week — Convergence of Fourier series; Laplace's equation and harmonic functions: basic properties, computations on rectangles and cubes (Fourier!), Poisson's formula for the disk

Seventh Homework Assignment - due Tuesday, March 29

Reading: Read sections 5.4, 5.5, and 6.1 through 6.3 of the text

Be prepared to discuss the following problems in class:

- Page 134 (page 129 in the first ed) problems 12, 13
- Page 145 (page 139 in the first ed) problems 2, 3
- Page 160 (page 154 in the first ed) problems 2, 5, 7
- Page 164 (page 158 in the first ed) problems 1, 6
- *Page 172 (page 163 in the first ed) problems 1, 2

Write up solutions of the following to hand in:

- Page 134 (page 129 in the first ed) problems 14, 15
- Page 145 (page 139 in the first ed) problems 4, 12
- Page 160 (page 154 in the first ed) problems 4, 6, 8
- Page 164 (page 158 in the first ed) problems 4, 7
- *Page 172 (page 163 in the first ed) problem 3

* means that we might postpone this section until the next assignment. Stay tuned.