REAL ANALYSIS
MATH 205/H140, HW#6

Chapter 5, exercises 15, 16, 28, 31, 38, 56; Chapter 6, exercises 8, 18; Chapter 7, exercise 6, and the following problem:

Problem 1.

Prove that an open set $\mathbb{U} \subset \mathbb{R}^n$ is connected if and only if it is path connected. Can one replace "open set" by "closed set" in this statement?