Math 445 – David Dumas – Spring 2019

Homework 13

Due Monday, April 29 in class (1:00pm)

(—) From the textbook: 43.1b, 43.5, 43.9, 45.2

(P1) Show that the space $\mathscr{C}(\mathbb{R},\mathbb{R})$ with the uniform topology is *not* second countable. (Hint: One way to do this is to find a discrete subspace in bijection with $\{0,1\}^{\mathbb{Z}}$.)