

**Topology, fall 2015**

**Homework 5, due Wednesday October 14 before class.**

Read Munkres §26 – 28.

Write solutions to the following problems.

Problems 3, 4, 5 on pages 170-171.

Problems 2abcde, 4 on pages 177-178.

I. Show that  $[0, 1]$  is not sequentially compact as a subspace of  $\mathbb{R}_\ell$ .  
Is it compact?

Additional suggested problems to think through: 7, 8 on page 171,  
3bc on page 178, and 6, 7 on pages 181-182.