Math 550A, Homework 4

Arbitrary Products

Due in class, Thursday, 3/6

Reading   Read §19 of Munkres.

Problems (to turn in)

1. Prove that if $\{X_\alpha\}_{\alpha \in J}$ is a collection of Hausdorff spaces, then $\prod_{\alpha \in J} X_\alpha$ is Hausdorff in both the product and box topologies.

2. Munkres §19, exercise 7.

3. Munkres §19, exercise 8.