

Math 6220 Introduction to Topology 2
Homework Set 4

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Problem 1: Prove the Barrett-Whitehead Lemma.

Problem 2: Prove that S^n for $n \geq 2$ is simply-connected.

Problem 3: Show that if $f : S^2 \rightarrow \mathbb{R}^2$ is continuous and satisfies $f(-x) = -f(x)$ for all $x \in S^2$, then there exists an $x_0 \in S^2$ with $f(x_0) = 0$.