Module 7 : Relative homology, exicism and the Jordan Brouwer separation theorem Lecture 41 : The Jordan-Brouwer separation theorem

Exercises:

- 1. Prove the second equality in equation (41.1).
- 2. Prove corollary (41.6).
- 3. Prove that there is no injective continuous mapping from S^n into \mathbb{R}^n . ([11], p. 217)
- 4. Show that no proper subset of S^n can be homeomorphic to S^n . ([11], p. 217)
- 5. Let Ω be an open subset of \mathbb{R}^n and $f: \Omega \longrightarrow \mathbb{R}^n$ be an injective continuous map. Show that f is a homeomorphism onto its image. ([11], p. 217)