

Math 220C: Complex Analysis (UC San Diego, spring 2017)
Problem Set 2 (due Friday, April 21)

1. Find an example online of a (nonempty) topological space which is connected but not arcwise connected, and give me just the URL (not the example itself).
2. Prove Conway, Proposition IX.5.6; then use it to show that for every positive integer n , every connected open subset of \mathbb{R}^n or \mathbb{C}^n is arcwise connected.
3. Conway, exercise IX.5.3.
4. Conway, exercise IX.5.4.
5. Conway, exercise IX.6.5.
6. Conway, exercise IX.6.7.