

**Math 2326 - Introduction to Abstract Mathematics**  
**Assignment 27 - Due Friday, April 4**

**Problem 91:** Establish the following set-theoretic equivalences.

a. For any reals  $a < b$ ,  $(a, b) \sim (0, 1)$ .

b.  $(\frac{-\pi}{2}, \frac{\pi}{2}) \sim \mathbb{R}$

**Problem 92:** Show that every infinite set  $X$  has an infinite countable subset.