Math 3325 Dr. Duval

PRINCIPLES OF MATH Homework 12

Fall 2019

due Tuesday, November 26

- **1.** Let $h: \mathbb{R} \to \mathbb{R}$ be increasing over all of \mathbb{R} . Assume that its inverse h^{-1} relation is also a function, with domain \mathbb{R} . Prove that h^{-1} is also increasing over all of \mathbb{R} .
- 2. Find a bijection (one-to-one correspondence) between the intervals on the real line [3, 5] and [7, 10]. Prove that your function is one-to-one and onto the appropriate codomain.