## Math 300 Intro Math Reasoning Worksheet 9: Equinumerability

- (1) Prove that  $P(\mathbb{N} \times \mathbb{Z}) \sim \mathbb{N}\{0,1\}$
- (2) Suppose that  $A \sim A'$  and  $B \sim B'$ . Prove that  $A \times B \sim A' \times B'$