Quiz 3

Student ID Number: Name _____

Math 180B, 3PM

Please justify all your answers April 25, 2019

Please also write your full name on the back

1. Let p be a prime. Prove that the only elements of $(\mathbb{Z}/p\mathbb{Z})^\times$ that are their own inverses are 1 and $p-1$.

2. Let p be an odd prime. Prove that the product of two primitive roots mod p is *not* a primitive root mod p.