

Math 200
Test 3 Take Home Portion

This portion of Test 3 is due in my office (McK 245) by 3pm ET on Friday, December 6.
In completing this portion, you may use your textbook and class notes but no other resources.

1. Find the remainder when 1236^{1532} is divided by 17.

2. Find the remainder when 1236^{1532} is divided by 31.

3. Find THREE DIFFERENT PAIRS of integers a, b that satisfy the congruence $ab \equiv 1 \pmod{47}$.

4. Find the remainder when 10^{1231} is divided by 3003.