

MATHEMATICS 153, SPRING 2020, QUIZ 2

Directions: The answers to this quiz are to be submitted to the instructor of your discussion section by **11:59 P.M.** on **Tuesday, May 19**. Please include your name, student identification number, and discussion section number on the worked out quiz.

1. Find a two digit integer c such that $101c \equiv 1 \pmod{107}$. This congruence has a unique solution mod 101 because both 101 and 107 are primes.
2. Take the last four digits **ABCD** of your student identification number, and let **AB** and **CD** be the corresponding two digit numbers obtained. Solve the simultaneous congruence system $x \equiv \mathbf{AB} \pmod{101}$ and $x \equiv \mathbf{CD} \pmod{107}$.

You may use a calculator or simple programmable device to work this quiz. Although you may consult with other students about this problem, the answers you submit must be your own work and no one else's.