

0 1 2 3 4 5 6 7 8 9  
0 1 2 3 4 5 6 7 8 9  
0 1 2 3 4 5 6 7 8 9  
0 1 2 3 4 5 6 7 8 9

Name: \_\_\_\_\_

CSU ID: \_\_\_\_\_

Cross boxes to the left for to the last 4 digits of your ID.

## MTH 220 - Fall 2019 - Quiz 11

1. Define  $a \equiv b \pmod{n}$ , where  $a, b, n \in \mathbb{Z}$  with  $n \geq 2$ . In alternative, you can give an equivalent criterion to the definition.
2. Find the least non negative residue of  $3^{50}$  modulo 19.
3. Find the least non negative residue of  $20^{-1}$  modulo 47.

DRAFT