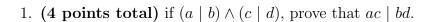
## Quiz 3: October 18, 2018

Left Neighbor:	Right Neighbor:
Name:	Student ID:
Section TA:	

This is a closed book quiz



2. (4 points total) Prove if 
$$a, b, c, d, m \in \mathbb{Z}$$
 and  $m \geq 2$  and  $a \equiv b \pmod{m}$  and  $c \equiv d \pmod{m}$  then  $(a + c) \equiv (b + d) \pmod{m}$ .

3. (2 points total) Rewrite  $\neg \forall x P(x)$  so that the negation sign comes after the quantifier, and briefly explain why it is the correct negation.