

Do the Thinking Land and proof scratch draft of your group's Theorem on the your groups's AWW board. Then submit a group Latexed final version of your proof. Be sure to follow the Writing Guidelines. One submission per group by the group,s designated groups submitter is sufficient as long as all group member's PIN is on the one submission. Write your PIN on your AWW Board.

Theorem 1. (for Group 1) AWW Board Link for Group 1.

Let $n \in \mathbb{N}$ and $a_1, a_2, b_1, b_2 \in \mathbb{Z}$. Let

$$a_1 \equiv a_2 \pmod{n}$$

and

$$b_1 \equiv b_2 \pmod{n}.$$

Then $a_1 + b_1 \equiv a_2 + b_2 \pmod{n}$.

Theorem 2. (for Group 2) AWW Board Link for Group 2.

Let $n \in \mathbb{N}$ and $a_1, a_2, b_1, b_2 \in \mathbb{Z}$. Let

$$a_1 \equiv a_2 \pmod{n} \quad \text{and} \quad b_1 \equiv b_2 \pmod{n}.$$

Then $a_1 b_1 \equiv a_2 \cdot b_2 \pmod{n}$.

Theorem 3. (for Group 3) AWW Board Link for Group 3.

Let $n \in \mathbb{N}$ and $a, b, c \in \mathbb{Z}$. If $a \equiv b \pmod{n}$ and $b \equiv c \pmod{n}$, then $a \equiv c \pmod{n}$. (transitive)
