TRUE OR FALSE? (Don't guess! The number of incorrect responses will be subtracted from the number of correct ones. Thus, random guessing earns you what you deserve.)

_____1. \( a^{p-1} \equiv 1 \pmod{p} \) for all integers \( a \) and primes \( p \).

_____2. \( a^{p-1} \equiv 1 \pmod{p} \) for all integers \( a \) and primes \( p \) if \( a \) is relatively prime to \( p \).

_____3. \( \phi(n) \leq n \) for all \( n \in \mathbb{Z}^+ \).

_____4. \( 3^{12} - 1 \) is a multiple of 13.

_____5. The units in \( \mathbb{Z}_n \) are the positive integers less than \( n \) and relatively prime to \( n \).

_____6. The product of two units in \( \mathbb{Z}_n \) is always a unit.

_____7. The product of two nonunits in \( \mathbb{Z}_n \) may be a unit.

_____8. The product of a unit and a nonunit in \( \mathbb{Z}_n \) is never a unit.

_____9. Every congruence \( x \equiv b \pmod{p} \), where \( p \) is a prime, has a solution if \( a \) is relatively prime to \( p \).

_____10. Every congruence \( ax \equiv b \pmod{p} \), where \( p \) is a prime has a solution.