

Elementary Number Theory: The Theory of Congruences

Arjun Vardhan

†

Created: 8th April 2022

Last updated: 8th April 2022

1 Basic Properties of Congruence

- Let $n \in \mathbb{N}$. $a, b \in \mathbb{Z}$ are said to be congruent modulo n , denoted $a \equiv b \pmod{n}$, if $n \mid (a - b)$.
-

2 Binary and Decimal Representations of Integers

-

3 Linear Congruences and the Chinese Remainder Theorem

-