Numeral System Conversions

Conversion	Method	Example

Binary Arithmetic

Operation	Rules	Example

Negative Numbers: Two's Complement

Method:

Invert all bits (1's complement).

Add 1 to the result.

Example:

-5_{10} in 4-bit binary:

Step 1: 5 = 0101 → Invert → 1010.

Step 2: 1010 + 1 = **1011** (represents -5).