Integer types

Cairo uses the following integer types: Type Minimum Maximum u8 0 2^8 - 1 u16 0 2^16 - 1 u32 0 2^32 - 1 u64 0 2^64 - 1 u128 0 2^128 - 1 u256 0 2^256 - 1 Theusize type is an alias tou32 , and is used for array indexing.

Integer Creation

All integer types exceptu256 can be created as literals using the appropriate suffix. Theu256 type is only supported by construction from other types. fn main() { let x: u8 = 10_u8; let y = 0xff_u64; // let z = 10_u256; // Error: u256 literals are not supported let z: u256 = u256 { high: 0_u128, low: 10_u128 } // 10 in u256 type }

Integer Operations

Currently, all integer types butu256 support the operations in the following table. Operation Description Supported byu256 + Addition Yes - Subtraction Yes * Multiplication Yes / Integer division Yes % Modulo No == Equality Yes != Inequality Yes < Less than Yes <= Less than or equal Yes

> Greater than Yes = Greater than or equal Yes | Bitwise or Yes & Bitwise and Yes ^ Bitwise xor Yes

9.1.2 Felt252 type ð§ 9.1.4 String types ð§