Numeric Types

- Integers
- Rationals
- Reals
- Complex

Exactness

- A given numeric value may be *exact* or *inexact*

- *Exact* numbers:
  - All integers
  - All rationals
  - Complexes that have only integer and/or rational parts

- *Inexact* numbers:
  - All reals
  - Complexes that have one or more real parts

Pre-Defined Type Predicates

- `(number? ` *x* `)`
- `(exact? ` *x* `)`
- `(inexact? ` *x* `)`
- `(integer? ` *x* `)`
- `(real? ` *x* `)`
- `(rational? ` *x* `)`
- `(complex? ` *x* `)`

Pre-Defined Predicates

- `(zero?` *x*`)`
- `(positive?` *x*`)`
- `(negative?` *x*`)`
- `(odd?` *x*`)`
- `(even?` *x*`)`

Pre-Defined Comparisons

- $(= \quad x_1 \quad \ldots \quad x_n)$
- $(< \quad x_1 \quad \ldots \quad x_n)$
- $(<= \quad x_1 \quad \ldots \quad x_n)$
- $(> \quad x_1 \quad \ldots \quad x_n)$
- $(>= \quad x_1 \quad \ldots \quad x_n)$

Pre-Defined Arithmetic

- $(+\ x_1\ ...\ x_n)$
- $(-\ x_1\ ...\ x_n)$
- $(*\ x_1\ ...\ x_n)$
- $(/\ x_1\ ...\ x_n)$
- `(quotient` $x\ y$`)`
- `(remainder` $x\ y$`)`
- `(modulo` $x\ y$`)`

Other Pre-Defined Operations

- `(gcd` *x y*`)`
- `(lcm` *x y*`)`
- `(floor` *x*`)`
- `(ceiling` *x*`)`
- `(max` x_1 ... x_n`)`
- `(min` x_1 ... x_n`)`
- and many, many more