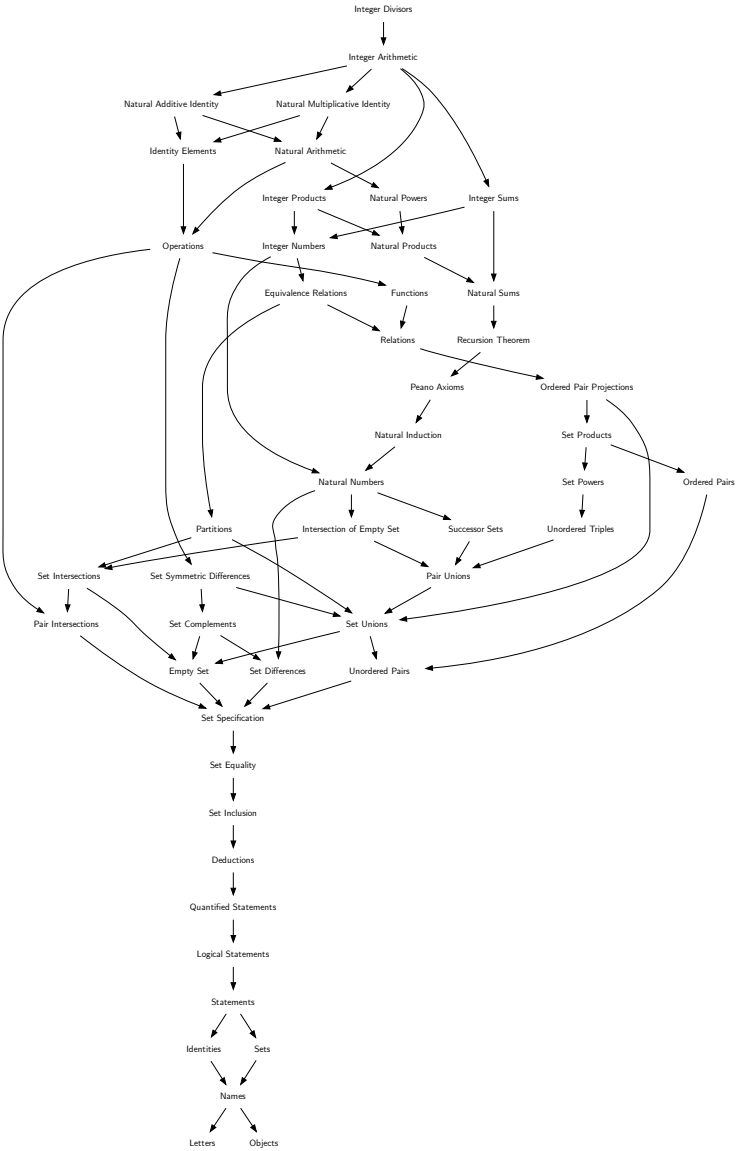
Definition

Let $a, b \in \mathbf{Z}$. a is a *divisor* of b if there exists $k > 0$ so that $ak = b$.

If instead $b = ak + r$ where $r > 0$ and $r < a$, then we call r the *remainder* of dividing a into b.

Notation

We denote the remainder of dividing a into b by $b \mod a$.


Integer Divisors
Integer Arithmetic
Natural Additive Identity
Natural Multiplicative Identity
Identity Elements
Natural Arithmetic
Integer Products
Natural Powers
Integer Sums
Operations
Integer Numbers
Natural Products
Equivalence Relations
Functions
Natural Sums
Relations
Recursion Theorem
Peano Axioms
Ordered Pair Projections
Natural Induction
Set Products
Natural Numbers
Set Powers
Ordered Pairs
Partitions
Intersection of Empty Set
Successor Sets
Unordered Triples
Set Intersections
Set Symmetric Differences
Pair Unions
Pair Intersections
Set Complements
Set Unions
Empty Set
Set Differences
Unordered Pairs
Set Specification
Set Equality
Set Inclusion
Deductions
Quantified Statements
Logical Statements
Statements
Identities
Sets
Names
Letters
Objects