Why

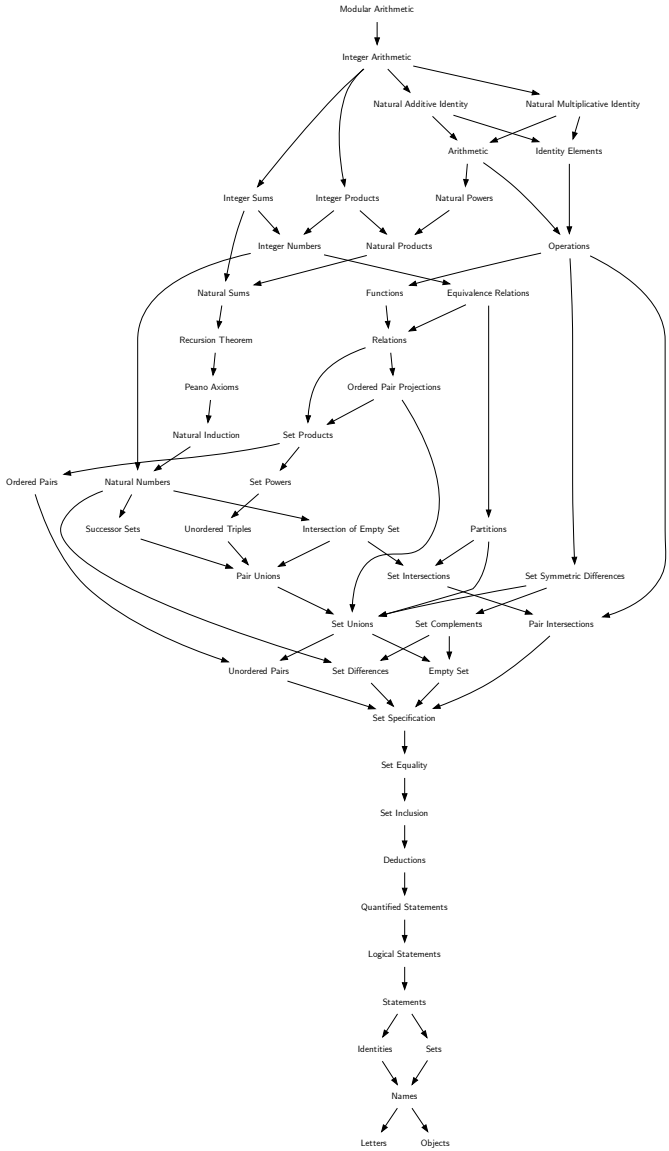
We want to count in circles.[1]

Definition

Let $n \in \mathbf{Z}$ with $n > 1$ and take $a, b \in \mathbf{Z}$. The integers a and b are *congruent modulo* n (or with respect to the *modulus* n) if n is a divisor of their difference.[2]

[1] Future editions will expand.

[2] Future editions will expand, and may need a sheet on congruence relations.


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