Why

[1]

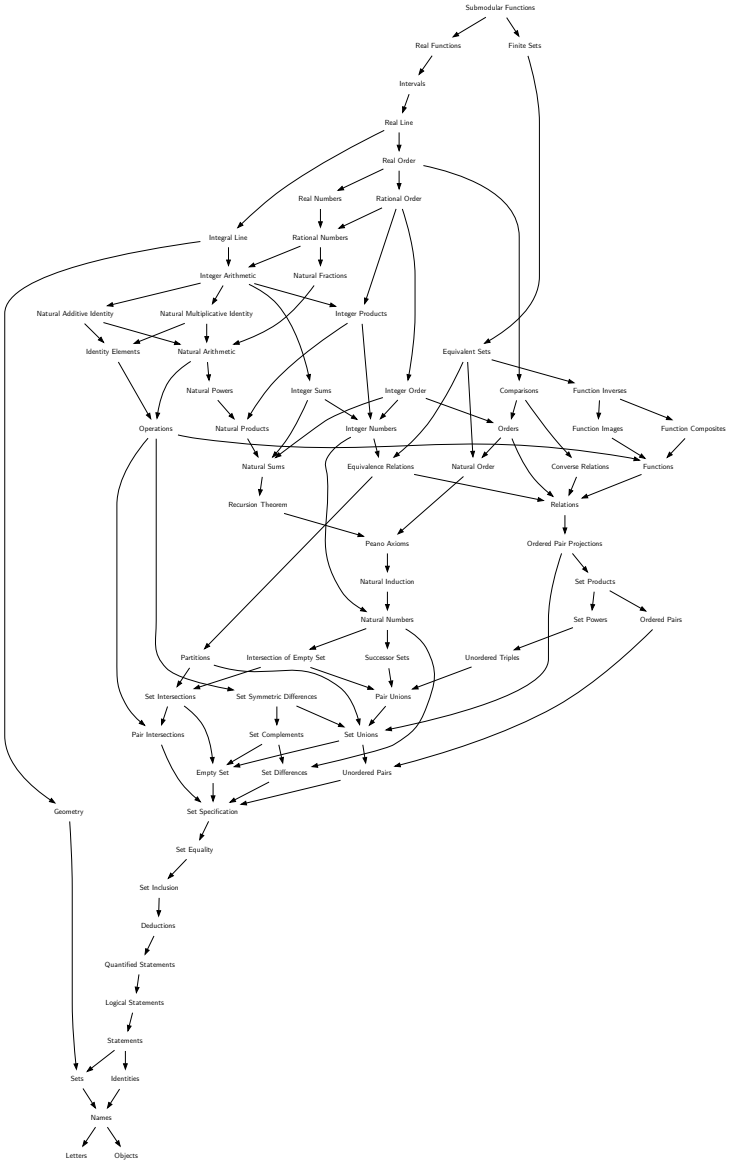
Definition

Let X a finite nonempty set. A function $f : \mathcal{P}(X) \to \mathbf{R}$ is *submodular* if

$$f(S \cup T) + f(S \cap T) \leq f(S) + f(T)$$

for all $S, T \subset X$.

[1] Future editions will include. The discussion will likely be genetic, through combinatorial optimization.


Submodular Functions
Real Functions
Finite Sets
Intervals
Real Line
Real Order
Real Numbers
Rational Order
Integral Line
Rational Numbers
Integer Arithmetic
Natural Fractions
Natural Additive Identity
Natural Multiplicative Identity
Integer Products
Identity Elements
Natural Arithmetic
Equivalent Sets
Natural Powers
Integer Sums
Integer Order
Comparisons
Function Inverses
Operations
Natural Products
Integer Numbers
Orders
Function Images
Function Composites
Natural Sums
Equivalence Relations
Natural Order
Converse Relations
Functions
Recursion Theorem
Relations
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
Geometry
Set Specification
Set Equality
Set Inclusion
Deductions
Quantified Statements
Logical Statements
Statements
Sets
Identities
Names
Letters
Objects