### Why

What is the additive inverse of $[(a, b)]$ in the rationals?

### Result

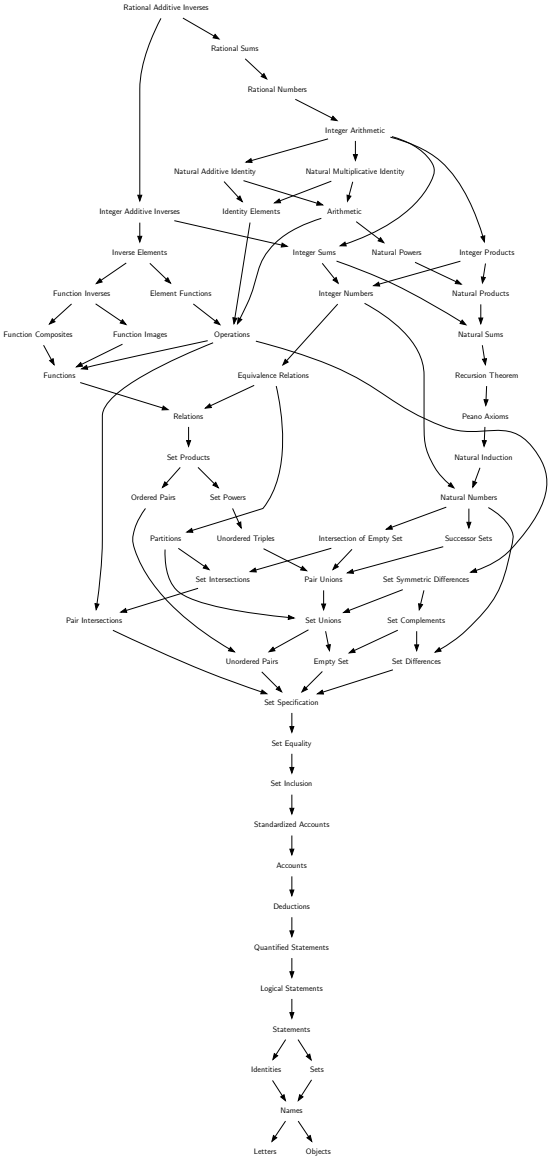
**Proposition 1.** *The additive inverse of* $[(a, b)] \in \mathbf{Q}$ *is* $[(-a, b)]$.

### Notation

We denote the additive inverse of $q \in \mathbf{Q}$ by $-q$. We denote $a + (-b)$ by $a - b$.

### Subtraction

We call the operation $(a, b) \mapsto a - b$ *subtraction*.


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