Why

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

Result

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

Notation

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

Subtraction

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

Integer Additive Inverses

Inverse Elements

Element Functions   Function Inverses   Integer Sums

Operations   Function Images   Function Composites   Integer Numbers   Natural Sums

Functions   Equivalence Relations

Relations   Recursion Theorem

Peano Axioms

Set Products   Natural Induction

Set Powers   Natural Numbers   Ordered Pairs

Partitions   Unordered Triples   Intersection of Empty Set   Successor Sets

Set Symmetric Differences   Set Intersections   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

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