BASICS

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WHAT IS AN ALGORITHM?

• A computable set of steps to achieve a desired result.
• All algorithm must satisfy the following criteria:
  • Input
  • Output
  • Definiteness
  • Finiteness
  • Effectiveness
EXAMPLE

• Statement 1: “Is $n=2$ the largest value of $n$ for which there exist positive integers $x$, $y$, and $z$ such that $x^n + y^n = z^n$ has a solution?”

• Statement 2: “Store 5 divided by zero into $x$ and go to statement ㄆ.”

• Which criterion do they violate?
  • Input
  • Output
  • Definiteness
  • Finiteness
  • Effectiveness