

λ Calculus

Church's λ Calculus: Brief History

- One of a number of approaches to a mathematical challenge at the time (1930): **Constructibility**
 - (What does it mean for an object, e.g. a natural number, to be constructible?)
 - aka "effective computability", "computability"
- Work in parallel included:
 - Turing's work on Turing machines
 - Gödel's work on general recursive functions

History (continued)

- In late 30's, Church, Kleene and Turing showed equivalence of their respective notions.
- Led to Church's thesis: notion of a computable function should be identified with the notion of a general recursive function.