

**Alan Turing** 

23/6/12 - 7/6/54

## Computability

The Church-Turing thesis states that "everything algorithmically computable is computable by a Turing machine." Turing proved there are things that cannot be computed by a Turing machine.

## Cryptanalysis

Turing was instrumental in the British code breaking effort that cracked the German Enigma code during WWII. The impact of this effort was so great that it is said to have changed the outcome of WWII.

## The "Imitation Game"

Proposed to make the question "can machines think?" scientifically testable, by replacing it with the question, "can a machine behave (converse) in a way that is indistinguishable from a human?" This has become known as the Turing Test.

