Hua Loo-Keng

12 Nov. 1910 ~ 12 June 1985

Early Life

Hua was born in Jintan, China. As a child, he showed **exceptional talent in mathematics**, and preferred to muse and study instead of play with other children, which made him seem **"nerdy"** among his peers. In his teens, Hua's family **arranged a marriage** between him and XiaoYuan Wu; she would be his lifelong companion.

Education

Due to societal turbulence during the time of the Republic of China and limited family income, Hua was **forced to drop out of secondary school**. Although never awarded a college degree, Hua **independently studied** advanced math topics like analysis and number theory. Eventually, his learning and research gained him a reputation among scholars; he became an **assistant professor at Tsinghua university**, and received honorary doctorates from multiple universities.

Contributions

He m**ade pioneering advances in number theory**, especially involving prime numbers and Diophantine equations (notably **Hua's Inequality**). He authored many textbooks, such as **"Introduction to Number Theory"**, to improve the way mathematics was taught and studied in China. In addition, he **mentored many young mathemematicians**, notably **Chen Jing-Ren**, who also became accomplished researchers.

Overcoming Adversity

Shortly after he married, Hua **fell ill and** was **bedridden** for a year, yet he continued to **sustain his family by writing mathematics articles**. During his middle years as an intellectual— during China's cultural revolution — he often **suffered beatings and his home was rummaged**. This undermined his health and relationship with his family, yet Hua never let these events affect his work, for he wanted **to devote all his energy to making his country stronger and more developed.**

FUN FACTS

Hua could read and understand mathematics works in **English, French and German**. He also had a hidden talent for **Chinese calligraphy**, an art that demands precision and patience. Hua's contributions extend to politics as well: he was also a public advocate for the **Chinese communist party**; he solved math problems related to **resource allocation** as a way to contribute to China's industrialization.