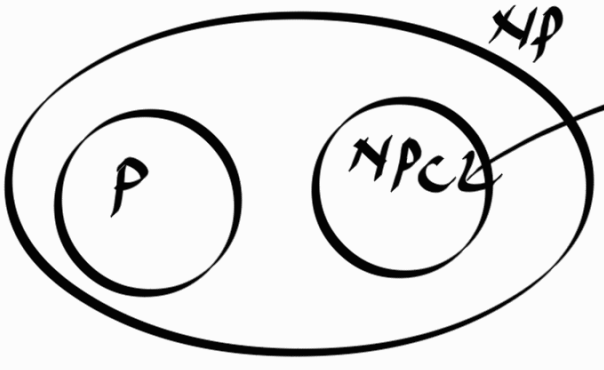
In 1970, Stephen Cook and Leonid Levin discovered that certain problems in NP whose individual complexities is related to that of the entire class.

If a poly-time solution exists for any of these problems, all problems in NP is polynomially solvable
These set of problems are called NP-complete (NPC) problems.



special set of problems in NP

Why is this important?

- If you are trying to prove P=NP, then find a poly-time algo for one of the NPC problems.
- Proving a problem is NPC is a strong indication that the problem does not have a poly-time algorithm.