

Section 19.6: Rookie Mistakes

Rookie Mistakes (Part 1)

Rookie mistake #1: Thinking that "NP" stands for "not polynomial."

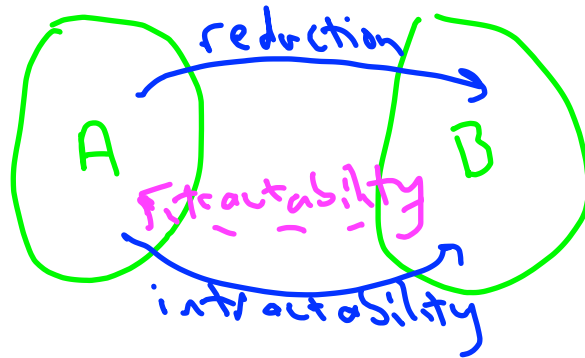
Rookie mistake #2: Saying that a problem is "an NP problem" or "in NP" instead of "NP-hard."

Rookie mistake #3: Thinking that NP-hardness doesn't matter because NP-hard problems can always be solved in practice anyway.

Rookie Mistakes (Part 2)

Rookie mistake #4: Thinking that advances in computer technology will rescue us from NP-hardness.

Rookie mistake #5: Devising a reduction in the wrong direction.



Acceptable Inaccuracies

Acceptable inaccuracy #1: Assuming that the " $P \neq NP$ " conjecture is true.

Acceptable inaccuracy #2: Using the terms "NP-hard" and "NP-complete" interchangeably.

Acceptable inaccuracy #3: Conflating NP-hardness with requiring exponential time in the worst case.