Games, graphs, and machines

October 16, 2024

Equivalent?

Are $\mathrm{Nim}(2, 3, 4)$ and $\mathrm{Nim}(3, 4, 5)$ equivalent?

Equivalent?

Is there a Nim game that distinguishes Nim$(2, 3, 4)$ and Nim(5)?

Equivalent?

Is there a Nim game that distinguishes $\mathrm{Nim}(2,3,4)$ and $\mathrm{Nim}(5)$?

Is there any game that distinguishes them?

$G + P \sim G$

With apologies to Tolstoy

All $\mathcal{P}$-games are alike; each $\mathcal{N}$-game is $\mathcal{N}$ in its own way.