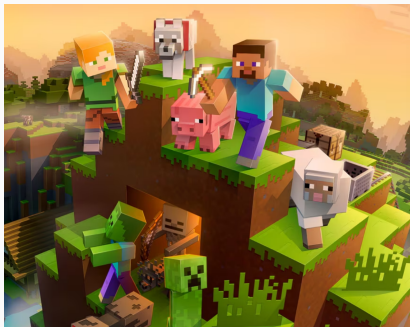


Games, graphs, and machines



October 11, 2024

Poset chomp

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1. Interpret *Chomp* as the Poset Chomp of a poset.
2. Interpret $\text{Nim}(2, 3)$ as the Poset Chomp of a poset.

Divisor poset chomp

Let S be the divisor poset of 30 excluding the number 1. Is $\text{PosetChomp}(S)$ an N -game or a P -game?

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$\text{PosetChomp}(S)$ an N -game or a P -game? What is the winning move?

Adding

Let S be the divisor poset of 30 excluding the number 1. Is $\text{PosetChomp}(S) + \text{Nim}(4, 4)$ an N -game or P -game?

$N+P$ is P ; $P+P$ is P

Theorem

1. $N + P = P$

2. $P + P = P$

$N+N$ could be either!

Find an example where an N -game + an N -game is a P game.

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Find an example where an N -game + an N -game is an N game.