Games, graphs, and machines
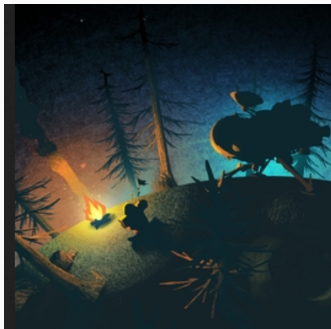
How to win at nim?

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Find all winning moves.

Continue playing

Convince yourself that from a zero nim-sum, all moves result in a non-zero nim-sum.

Continue playing

Convince yourself that from a non-zero nim-sum, it is always possible to move to a zero nim-sum.

More nim!

Decide if the following games are N/P. If they are N, find all the winning moves.

1. $Nim(1, 2, 4)$
2. $Nim(6, 7, 8, 9)$
3. $Nim(3, 4, 5, 5)$