## MATH 1300, Mathematical Explorations

# Nim

## Activity

- Have students work through the activities in Ch. 5 of the Games and Puzzles book.
- Class Discussion: What are binary numbers? How can we calculate them? Why are they useful in general? Why are they useful for Nim?

## Assignments

- 1. Have students calculate Nim-sums to determine who will win a few sample games.
- 2. Challenge: Exercise F1 (Northcott's Game) from chapter 5 of the Games and Puzzles book.

#### References and resources

Discovering the Art of Mathematics: Games and Puzzles

#### Follow-on activities

 ${\rm Chomp}$