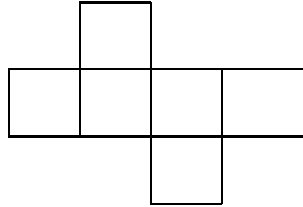


Math576 Combinatorial Game Theory

Homework 3

assigned Feb. 28, 2008; due next Thursday lecture

1. Two players play a subtraction game $S(2, 5, 6)$ of three heaps of sizes 7, 8, 9. Who wins this game? What is the best move for the first player?
2. Find the nim sequence for the subtraction game $S(2, 4, 7, 8)$. What is the period of this nim sequence?
3. Find the values of the following domineering game.



4. Use the known values of Toads-Frogs game on page 134-137. Who wins the following game? What is his best move?

T	T		F	T	F
	T	T		F	F
T	T	F		F	t