# Math576 Combinatorial Game Theory <br> Homework 2 <br> assigned Feb. 7, 2008; due next Thursday lecture 

1. State the nimber addition rule. Use it to find the values of the following nimber expression:
(a) $* 1+* 3+* 5$
(b) $* 2+* 5+* 7$
(c) $* 1+* 2+* 4$
(d) $* 1+* 3+* 9+* 27$
2. Find the values of the following blue-red-green Hackenbush games.

3. Find the values of the following Childish Hackenbush games.

4. Find the value of the following Toads-Frogs game.

| $T$ |  |  | $F$ | $T$ |
| :--- | :--- | :--- | :--- | :--- |$|$| F |
| :--- |

