## MA 327/ECO 327

## Homework \#1

Due Friday, August 31

1. Chapter 1, \#3.
2. Chapter 1, $\# 10$.
3. Chapter 1, \#16.
4. The Game of $(n, k)$, where $n$ and $k$ are positive integers, is a two player game. Begin with the number zero. Players alternately add a positive integer from 1 to $k$, inclusive, to the current running sum. The first player to exactly achieve the number $n$ wins. We already discussed the answers to the following questions, but answer them briefly in your own words. Which player can force a win? What is a guaranteed winning strategy? Why does this strategy work?
