CSE 321: Discrete Structures
Assignment #5
October 27, 1999
due: Wednesday, November 3

1. Section 3.2, exercise 10.
2. Section 3.2, exercise 12.
3. Section 3.2, exercise 34.
4. Section 3.2, exercise 40.
5. Define the Fibonnaci numbers as follows: $f(0) = 0$, $f(1) = 1$, and $f(n) = f(n-2) + f(n-1)$ for all integers $n \geq 2$. Prove by induction that, for all integers $n \geq 2$, the number of iterations used by Euclid's algorithm to compute $\gcd(f(n+1), f(n))$ is $n - 1$.