

Homework 10

1. Elaydi problem 12 page 143.
2. Elaydi problem 7 page 148 (Fibonacci numbers).
3. Elaydi problems 3,5 page 148.
4. Elaydi problem 10 page 166.
5. Elaydi problems 1-7 pg 165-166.
6. Let $f : \mathbf{R}^2 \rightarrow \mathbf{R}^2$ be given by the formula: $f(x, y) = \left(\frac{y}{2(1+x^2)}, \frac{x}{2(1+y^2)} \right)$. Find a Liapunov function and determine the stability of the point $(0, 0)$.