

29:206 HW# 1 due 2/5

- 1 Find all eventually periodic points of $F(x) = 3x(1 - x)$ of order 3.
- 2 Find all periodic points of $F(x) = \frac{\pi}{2} \sin(x)$ for $0 \leq x \leq \pi$. Determine the stability.
- 3 Pick μ satisfying $3 < \mu < 4$ and pick an $x \in [0, 1]$. Calculate the first ten points in the orbit of x : $x_1 \cdots x_{10}$, $x_0 = x$, $x_{i+1} = \mu x_i(1 - x_i)$.