

hw4 , due: Thursday, March 23, 4pm

Chapter 3, page 109

1. Q3.6 a difference equation with a supercritical pitchfork bifurcation and flip bifurcations
2. Q3.13 the twist map
3. Q3.16 a qualitative difference between the set of solutions of an ordinary differential equation and of a finite-difference approximation
4. Q3.26 an explicitly solvable map
5. Q3.29 Arnol'd tongues for the sine map

Chapter 4, page 144

6. Q4.7 a middle-halves Cantor set
7. Q4.10 the Sierpinski carpet