1. Create your own fractal, using the collage technique described in Section 6.3. Extra credit will be given for particularly original and/or attractive fractals. You can use the fractal-making applications linked to on the course webpage to get ideas.
   
   (a) Draw a detailed picture of your fractal.
   
   (b) Describe your fractal-making rule, showing the first few iterations.
   
   (c) Find your fractal’s dimension.

2. Using the applet at http://math.bu.edu/DYSYS/applets/nonlinear-web.html, complete Section 6.2 exercises 30, 32, and 37. For the two types of cobweb graphs (“logistic” and “tent”), experiment with different starting $x$-values. Summarize your findings in a paragraph.

3. Play the Chaos Game #1 at http://math.bu.edu/DYSYS/applets/chaos-game.html, on the medium level. Explain your strategy to win the game.