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Anne M Burns* (aburns@liu.edu), Department of Mathematics, C.W. Post Campus, Long Island University, Brookville, NY 11548. *Mfurcations, M=3,4,5,... or Parabolic Bifurcations in the Mandelbrot Set*. Preliminary report.

We present the necessary background and an algorithm for computer animations illustrating the parabolic bifurcations that take place for the family of functions $f(z,c)=z^*z+c$ as the parameter c travels along line segments from the origin through the boundary of the Mandelbrot Set, M . If the boundary of the large cardioid in M is crossed at a point c for which $f(z,c)$ has a parabolic fixed point, we can predict the nature of the explosions. (Received September 01, 2000)