Name: Dan Singer

Sabbatical Term: Fall 2008

On conclusion of the study, research or related activity funded by your sabbatical leave, please complete the following and return it to the Academic Affairs Office (WA 315) within four weeks following your return to campus. If the sabbatical leave supported additional study, attach a transcript or program certificate.

Give a very brief summary of your professional activities during your sabbatical leave.

I conducted research into the Jacobian conjecture and wrote a paper describing my results. The paper was submitted to The Electronic Journal of Combinatorics on December 10, 2008, and was published in Volume 16(1) on March 31, 2009. Title: A graph-theoretic method for choosing a spanning set for a finite-dimensional vector space, with applications to the Grossman-Larson-Wright module and the Jacobian conjecture.

Indicate how the professional activities during your sabbatical leave had an impact on your professional responsibilities, e.g., teaching, service, research.

I will continue to pursue the research leads I developed during my sabbatical. I will supervise a Master’s thesis project in mathematics based on my research.

Outline your plan for conducting a seminar (or similar experience) sharing the knowledge and understandings gained during your sabbatical leave with your department or other appropriate unit.

I gave a colloquium talk in the Department of Mathematics and Statistics on March 19, 2009, describing the results of my sabbatical research. Title: A graph-theoretic method for choosing a spanning set for a finite-dimensional vector space.

Date: May 7, 2009