อภินันทนาการ

13629715



GENERALIZED QUOTIENT THEOREM AND REMAINDER

THEOREM OF POLYNOMIAL BY

CONVOLUTION MATRIX



A Thesis Submitted to the Graduate School of Naresuan University
in Partial Fulfillment of the Requirements for the
Master of Science Degree in Mathematics
May 2006
Copyright 2006 by Naresuan University

This thesis entitled "Generalized Quotient Theorem and Remainder Theorem of Polynomial by Convolution Matrix" submitted by Sasisophit Buada in partial fulfillment of the requirements for the Master of Science Degree in Mathematics is hereby approved.

> W. Wanishaupidhat (Assoc.Prof.Wiwat Wanicharpichat, M.Ed.) Major Adviser Manej Siripituledet (Manoj Siripitukdet, Ph.D.) Chaiwal (Chaiwat Namnak, Ph.D.) Adviser (Assoc.Prof.Somyot Plubtieng, Ph.D.)

> > Suthip Su ansteir

Internal Examiner

(Assoc.Prof.Suthep Suantai, Ph.D.)

External Examiner

K. Perportwilen

(Assist.Prof.Kanuagnit Pupatwibul, Ph.D.)

Dean of the Graduate School

May 2006

ACKNOWLEDGEMENT

I am very greatly indebted to Assoc.Prof. Wiwat Wanicharpichat, my thesis adviser, for his untired offering me some thoughtful and helpful advice in preparing and writing this thesis. I am very thankful to my co-advisers, Dr. Manoj Siripitukdet and Dr. Chaiwat Namnak, for their many suggestions and constant support during this research. Moreover, I would like to thank Assoc.Prof.Dr. Somyot Plubtieng and Assoc.Prof.Dr. Suthep Suantai, the internal examiner and external examiner of this thesis. Besides, I would like to thank all of my teachers who have taught me for my knowledge and skills.

Finally, I am grateful to my parents for their concern and love. Without them this work would never have come into existence (literally).

Sasisophit Buada