

**DOMINATION NUMBERS AND ENDOMORPHISMS
ON CAYLEY DIGRAPHS OF RECTANGULAR
GROUPS**

NUTTAWOOT NUPO

**DOCTOR OF PHILOSOPHY
IN MATHEMATICS**

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**GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
JUNE 2017**

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The seal of Chiang Mai University is a circular emblem. It features a central figure of an elephant standing and facing left. Above the elephant is a five-pointed star with radiating lines. The Thai text "มหาวิทยาลัยเชียงใหม่" (Mahavithayalai Chiang Mai) is written in a circular path around the top of the seal. Below the elephant, the English text "CHIANG MAI UNIVERSITY" is written, followed by the year "1964" on the right side.

NUTTAWOOT NUPO

**A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN MATHEMATICS**

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THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF
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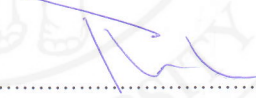
Examination Committee :


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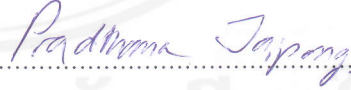

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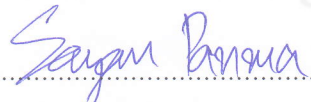

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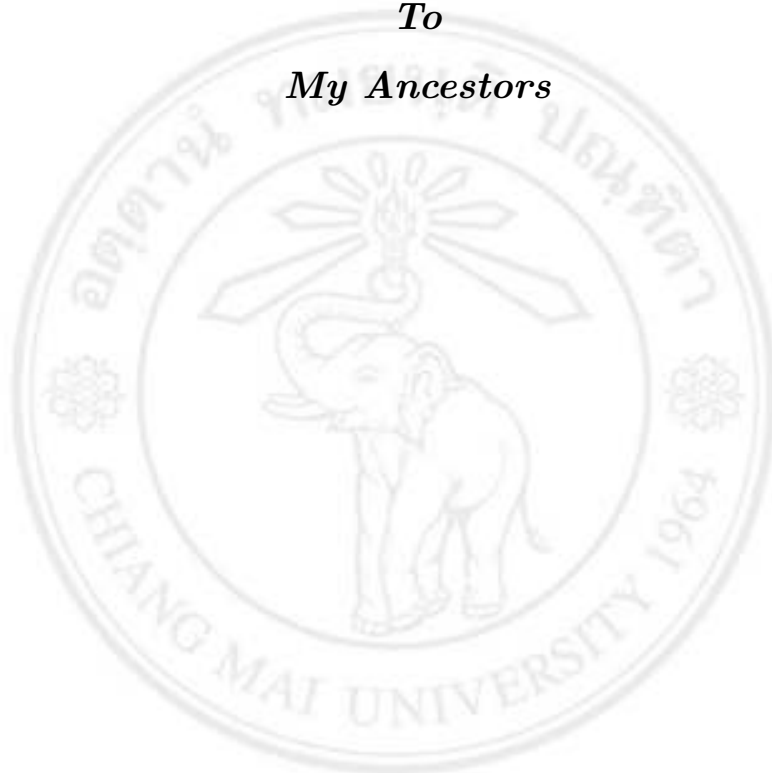

..... Member
(Asst. Prof. Dr. Thanasak Mouktonglang)


..... Member
(Asst. Prof. Dr. Sayan Panma)

29 June 2017

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*To
My Ancestors*



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Nuttawoot Nupo



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