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## ข้อความแห่งการริเริ่ม

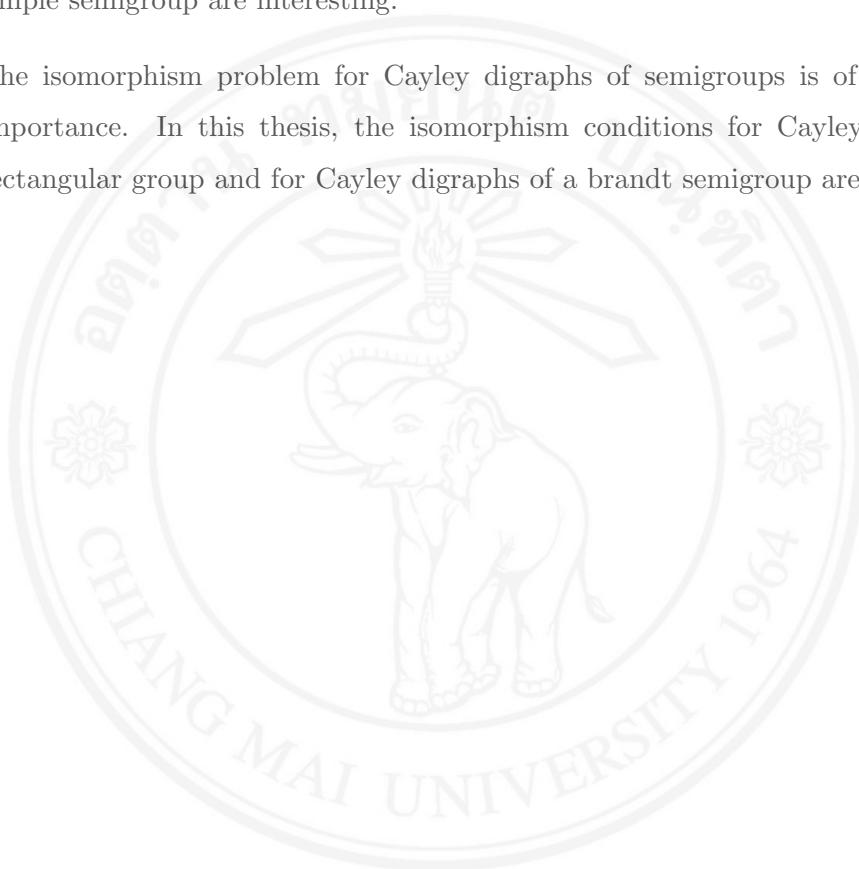
- 1) ได้กราฟเคลย์เลย์ของกิ่งกรุปเชิงเดียบวนบริบูรณ์ไว้รับการศึกษาอย่างแพร่หลาย ดังนั้นเงื่อนไขที่ใช้ระบุว่าได้กราฟไดจะเป็นไดกราฟเคลย์เลย์ของกิ่งกรุปเชิงเดียบวนบริบูรณ์จึงเป็นเรื่องที่่น่าสนใจศึกษา
- 2) ปัญหาการสมสัมฐานสำหรับไดกราฟเคลย์เลย์ของกิ่งกรุปเป็นปัญหาพื้นฐานที่มีความสำคัญ ในวิทยานิพนธ์นี้ได้นำเสนอเงื่อนไขการสมสัมฐานสำหรับไดกราฟเคลย์เลย์ของกรุปสี่เหลี่ยมนูนจากและสำหรับไดกราฟเคลย์เลย์ของกิ่งกรุปแบบนเดียว



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## STATEMENT OF ORIGINALITY

- 1) Cayley digraphs of completely simple semigroups have been studied extensively. Thus, the conditions for digraphs to be Cayley digraphs of a given completely simple semigroup are interesting.
- 2) The isomorphism problem for Cayley digraphs of semigroups is of fundamental importance. In this thesis, the isomorphism conditions for Cayley graphs of a rectangular group and for Cayley digraphs of a brandt semigroup are proposed.



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