

Title : Matrix determinant and subgroups of symmetric group

Author(s) : Pinthong Mueangmun

Student ID : 640510556

Major : Mathematics

Advisor(s) : Associate Professor Dr. Attapol Kaewkhao

Type of presentation : Oral Presentation (เฉพาะ ตัวแทนศ.ที่สาขาเลือกให้นำเสนอแบบบรรยาย)
 Poster (กรณี นำเสนอผลงานปัญหาพิเศษ/การค้นคว้าอิสระ)
 Cooperative Education (กรณี นำเสนอผลงานสหกิจศึกษา)

ABSTRACT

By studying the method of finding the determinant of a 3×3 matrix, repeat the first 2 columns, sum the products of the 3 diagonals from the upper left to the lower right, and subtract the sum of 3 diagonals from the upper right to the lower left, we generalize this idea to $n \times n$ matrix A . we call the quantity obtained the dihedrant, denoted by $Dih(A)$. We then explore some properties of $Dih(A)$, in particular we find some properties that ensure this quantity satisfies $Dih(A) = \det(A)$.