

**Paper 179 – Technology**

**MODIFICATION METHOD OF GAUSS - JORDAN OR ELEMENTARY ROW OPERATIONS ON  
UNIQUE SOLUTIONS SYSTEMS OF LINEAR EQUATIONS 3 VARIABLE AND 3 EQUATION**

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**ABSTRACT**

Gauss outlines three theories to solve linear equations. Where is the theory derived from the elimination method of addition, subtraction and substitution. But the problem on the students difficult to understand, so that required modification method of Gauss - Jordan to explain the transition from elimination method. The transition can be done is to combine the two theories of Gauss is to combine Multiplying a row by a number  $k \neq 0$  called Operation Type II and by adding a line  $i$  by multiplying  $k \neq 0$  on the other lines where  $i \neq j$  called Operation Type III became one is to add  $k_1 \neq 0$  times row  $i$  with  $k_2 \neq 0$  times row  $j$  where  $i \neq j$  of matrix  $A$  is called Type III Modification. So that the process can be faster and simpler.

**Keywords: Mathematics, Linear Algebra, Numeric Method**

