

**ANALISIS HUBUNGAN ANTARA KEMAMPUAN MATEMATIKA  
DAN ANALISIS KIMIA TERHADAP HASIL BELAJAR  
KIMIA SISWA PADA MATERI  
KESETIMBANGAN KIMIA**

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**ABSTRAK**

Penelitian ini dilaksanakan di SMA Negeri 7 Medan tentang Analisis Hubungan Antara Kemampuan Matematika dan Analisis Kimia Terhadap Hasil Belajar Kimia Siswa Pada Materi Keseimbangan Kimia. Tujuan dalam penelitian ini adalah (1) Untuk mengetahui apakah terdapat hubungan yang linear dan signifikan antara kemampuan matematika dengan hasil belajar kimia siswa; (2) Untuk mengetahui apakah terdapat hubungan yang linear dan signifikan antara kemampuan analisis terhadap hasil belajar kimia siswa; (3) Untuk mengetahui apakah terdapat hubungan yang linear dan signifikan antara kemampuan matematika dan kemampuan analisis terhadap hasil belajar kimia siswa. Populasi dalam penelitian ini adalah seluruh siswa kelas XI MIPA SMA Negeri 7 Medan sebanyak 7 kelas. Pengambilan sampel menggunakan teknik *sampling purposive*. Sampel yang diambil dalam penelitian ini adalah kelas XI MIPA 2. Instrumen yang digunakan terdiri dari: (1) instrumen tes kemampuan matematika berupa soal pilihan ganda; (2) instrumen tes kemampuan analisis kimia berupa soal esai; (3) instrumen tes kemampuan hasil belajar kimia berupa soal pilihan ganda. Hasil penelitian ini berupa: (1) terdapat hubungan yang linear dan signifikan antara kemampuan matematika terhadap hasil belajar kimia dengan nilai  $\text{Sig}_{(1\text{-tailed})} 0,000 < 0,05$ ; (2) terdapat hubungan yang linear dan signifikan antara kemampuan analisis terhadap hasil belajar kimia dengan nilai  $\text{Sig}_{(1\text{-tailed})} 0,000 < 0,05$ ; (3) terdapat hubungan yang signifikan antara kemampuan matematika dan kemampuan analisis kimia terhadap hasil belajar kimia dengan nilai  $\text{Sig}_{(1\text{-tailed})} 0,000 < 0,05$ .

**Kata Kunci** : Hubungan Antara Kemampuan Matematika Dan Analisis Kimia, Keseimbangan kimia, Hasil Belajar.



**ANALYSIS OF THE RELATIONSHIP BETWEEN MATHEMATICS  
ABILITY AND CHEMICAL ANALYSIS OF LEARNING  
RESULT STUDENT CHEMISTRY ON MATERIALS  
CHEMICAL EQUILIBRIUM**

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**ABSTRACT**

This research was conducted at SMA Negeri 7 Medan on the Analysis of the Relationship Between Mathematical Ability and Chemical Analysis of Students' Chemistry Learning Outcomes in Chemical Equilibrium Material. The objectives of this study are (1) to find out whether there is a linear and significant relationship between mathematical ability and student chemistry learning outcomes; (2) To find out whether there is a linear and significant relationship between analytical skills on students' chemistry learning outcomes; (3) To find out whether there is a linear and significant relationship between mathematical ability and analytical ability on students' chemistry learning outcomes. The population in this study were all students of class XI MIPA SMA Negeri 7 Medan as many as 7 classes. Sampling using purposive sampling technique. The sample taken in this study was class XI MIPA 2. The instruments used consisted of: (1) mathematical ability test instruments in the form of multiple choice questions; (2) chemical analysis ability test instrument in the form of essay questions; (3) the test instrument for chemistry learning outcomes is in the form of multiple choice questions. The results of this study are: (1) there is a linear and significant relationship between mathematical ability and chemistry learning outcomes with a Sig(1-tailed) value of  $0.000 < 0.05$ ; (2) there is a linear and significant relationship between analytical ability on chemistry learning outcomes with a Sig(1-tailed) value of  $0.000 < 0.05$ ; (3) there is a significant relationship between mathematical ability and chemical analysis ability on chemistry learning outcomes with a value of Sig(1-tailed)  $0.000 < 0.05$ .

**Keywords** : Relationship Between Mathematical Ability and Chemical Analysis, Chemical Equilibrium, Learning Outcomes.

