**Statement of Purpose**

At Anthony Wayne Jr. High the Math Department teaches an integrated curriculum in the 7th grade that is an introduction to Pre-Algebra and the 8th grade students take a Pre-Algebra course. The issue we try to address as a department is to prepare students to be successful as they enter the high school and their completion of the required four math credits. What students learn in Pre-Algebra are the basics to the courses needed to fulfill these graduation requirements.

Math is a very systematic course and students that can follow the rules of mathematics typically are very successful, because these rules are consistent throughout most required courses. The unit that I am proposing is essential to any successful mathematics student. The ability to understand how to use variables and how to solve multiple situations with variables come up nearly in all math courses. It is critical that all math students now how to problem solve when given varying types of equations, whether they are real-world problems or even algebraic equations.

After the completion of this unit all Pre-Algebra students will have the tools to write, solve, and evaluate equations from real life problems. Students will also have the ability to critically think through and problem solve their way through a variety of mathematical questions. This unit will also be consistent with the Ohio Mathematics Academic Content Standards.

The first Section in the unit covering variables and expressions is essentially a toolbox that all math students need to have a mastery of as they enter any math course. In math variables are used to represent many things and it is important that students understand what they are and what they are meant to represent. The second section of the unit is to me one of the most important areas of math that we often overlook in today’s society. The ability to add, subtract, multiply, and divide whole number’s without the use of a calculator is a lost art. I take the time in this unit to have students work on the basics of simple arithmetic; it is embarrassing to me when students can’t multiply 8 times 7 without a calculator.

I would like to think of this unit as being the necessities to survive any algebra math course. If students do not have these skills their success will be limited, and their ability to apply equations to real-life finance problems, chemical reactions, and medical problems will be limited. The ultimate goal is to create life-long learners and if we can teach students to use these skills to solve problems they may become more productive in society.