

## North East ISD Mathematics Philosophy

*“Knowing mathematics means being able to use it in purposeful ways.*

*Mathematical ability comes from being taught math so that understanding is emphasized, ideas are explored, alternate methods are encouraged and the purpose for what is being done is always evident.”*

*( M. Burns)*

### Core Values:

- **Depth of Understanding**
- **Reasoning**
- **Purpose**
- **Communication**

### Core Purpose:

- **Mathematics is something to be deeply understood so that it can be used effectively.**

### Deep understanding of mathematics content includes:

- a knowledge of relative size of numbers and how numbers are put together;
- a proficiency with basic skills;
- the ability to use patterns, relationships, and algebraic thinking to analyze situations;
- the use of visual and spatial skills developed through the study of geometry;
- a competence with a variety of techniques, tools and formulas for determining measurement; and
- the ability to make sense out of data.

### Effective use of mathematics includes the ability to:

- solve problems arising from real-life and mathematical situations;
- use computers, especially for application of tools like spreadsheets and databases, to solve time-consuming problems;
- use models, known facts, properties, and relationships to explain thinking and justify answers and solution strategies; and
- use patterns and relationships to analyze mathematical situations.

*“Each NEISD teacher of mathematics will create a classroom environment in which students will make sense of mathematics and acquire confidence in using it. Through the NEISD Mathematics Program, students will know mathematics and be able to use it in purposeful ways.”*

*(Dr. Richard A. Middleton)*