

***Math Power Standards***  
***Grades 9 – 12***

All Noble High School graduates will demonstrate the following Power Standards through individual course objectives in mathematics.

- A. COMMUNICATION: Students will effectively communicate about a mathematical procedure or concept, its use and its implications.
  - 1. Use verbal and written mathematical language to convey learning
  - 2. Clearly express their mathematical thinking to peers, teachers, and others
  - 3. Understand and evaluate the processes and ideas of others
  
- B. REPRESENTATION: Students will use multiple representations to illustrate a mathematical concept.
  - 1. Develop different types of representations to organize, record, and model mathematical ideas
  - 2. Use a variety of mathematical representations to solve problems
  
- C. REASONING: Students will justify conclusions and make conjectures through mathematical reasoning.
  - 1. Create and examine mathematical conjectures
  - 2. Design and analyze mathematical arguments
  - 3. Choose and apply the most appropriate type of reasoning for a given scenario
  
- D. CONNECTIONS: Students will make connections to ideas both in and out of the mathematics classroom.
  - 1. Make connections among mathematical ideas
  - 2. Understand that mathematical ideas spiral and build upon one another
  - 3. Recognize that mathematics is integral in other disciplines
  
- E. PROBLEM SOLVING: Students will apply appropriate problem solving strategies.
  - 1. Utilize and adapt a variety of strategies to solve problems
  - 2. Apply the metacognitive strategies (plan, monitor, evaluate, loop back) to the process of mathematical problem solving