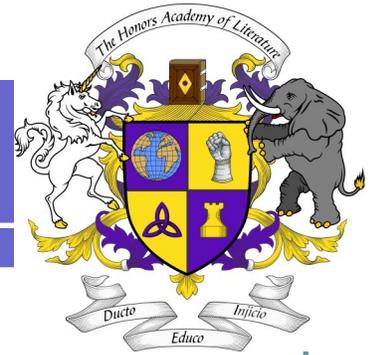


MS. AUDREY— MATH

HONORS ACADEMY OF LITERATURE



Common Core State Standards

CCSS.Math.Content.8.EE.A.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.

CCSS.Math.Content.8.EE.A.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.

CCSS.Math.Content.6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?.*

Objectives and Validation

- Objective: Students will investigate and experiment with the properties of load-bearing structures
Measure: Teacher observation during activity
- Objective: Students will use oral and written literacy skills to explain a math problem through film.
Measure: Mathcounts video project.
- Objective: Group 1: Students will be able to simplify, add, subtract, multiply, and divide fractions.
Measure: teacher observation, classwork, and homework.
- Objective: Group 2: Students will understand the properties of exponents and be able to manipulate expressions involving, positive, negative, and fractional exponents.
Measure: teacher observation and classwork.

In-class Graded Assignments

- Mathcounts scripts should be complete by Friday.**
- Classwork related to lessons**

Homework Graded Assignments

- Support math video projects**
- Complete 3 choices from homework menu**

Mini-Lesson Topics

Khan Academy	
Mathcounts script reviews	
Fractions pretest	
Comparing exponents	
Video shooting and editing	
Constructing load-bearing structures	
Simplifying, adding, subtracting, multiplying, dividing fractions	
Positive exponents and laws of exponents review	
Zero and negative integer expo-	
Fractional exponents	