

MP1a-Expressions and Equations

Content Area: **Math**
Course(s): **Math 7 PRE-ALGEBRA, Math 7 Pre-Algebra Honors**
Time Period: **Marking Period 1**
Length: **Weeks 2-4 Module 1**
Status: **Published**

Essential Questions

- How can you solve real-world and mathematical problems with numerical and algebraic equations and inequalities?

Big Ideas

- Use properties of operations to generate equivalent expressions.
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
- Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations or inequalities to solve problems by reasoning about the quantities.

Diversity Integration

Objective: Students will be able to create, interpret, and use equations to figure out the factors that affect population growth.

Description of Activity: Students will explore the science of demography. They will explore how birth rate, death rate, emigration, and immigration affect population growth with a country of their heritage. Students will analyze how changes in these indicators affect resource sustainability and how resource availability affects population growth.

Technology Connection

8.2.8.ED.5 Explain the need for optimization in a design process

Enduring Understandings

Expressions and Equations

7.EE.1 [M] Apply properties of operations as strategies to add, subtract, factor and expand linear expressions with rational coefficients.

Mathematical Practices Focus

1. Make sense of problems and persevere in solving them. Lesson 1.1, 1.4
4. Model with mathematics. Lesson 1.1,1.3,1.4
5. Use appropriate tools strategically. 1.4
7. Look for and make use of structure. Lesson 1.1