Unit 4a-Solving Systems of Linear Equations

Content Area: **Mathematics**
Course(s): **Math 7 Pre-Algebra Honors**
Time Period: **Marking Period 4**
Length: **WK 1-2 Go Math! Advanced 2 Module 16**
Status: **Published**

Essential Questions

- How can you solve a system of linear equations by graphing, substitution or elimination?
- How do you solve a system of linear equations by multiplying?
- How do you solve a system of linear equations with no solutions or multiple solutions?

Big Ideas

- Simultaneous linear equations can be analyzed and solved.
- Systems of linear equations can have one solution, no solutions or infinitely many solutions.

CSDT Technology Connection

8.2.8.ETW.1 Illustrate how a product is upcycled into a new product and analyze the short- and long-term benefits and costs.

Enduring Understandings

Expressions and Equations

8.EE.C.8a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.

8.EE.C.8b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations.

Mathematical Practices Focus

1. Make sense of problems and persevere in solving them. Lesson 16.2, 16.3, 16.4

2. Reason abstractly and quantitatively. Lesson 16.1, 16.3, 16.4, 16.5

3. Construct viable arguments and critique the reasoning of others. Lesson 16.1, 16.2, 16.3, 16.4, 16.5

4. Model with mathematics. Lesson 16.1, 16.2, 16.3, 16.4, 16.5

6. Attend to precision. Lesson 16.1, 16.2

7. Look for and make use of structure. Lesson 16.2, 16.3, 16.4, 16.5

8. Look for and express regularity in repeated reasoning. Lesson 16.2, 16.4