The UbD Template, Version 2.0

<table>
<tr><td>Time Frame: 20 days</td><td>Unit 4: Linear Equations and Linear Systems</td><td>Course Name: Grade 8 Illustrative Math</td></tr>
<tr><td colspan="3">Stage 1 - Desired Results</td></tr>
<tr><td rowspan="6">Established Goals
What content standards will this unit address?

8.EE.C.8: Analyze and solve pairs of simultaneous linear equations.
8.EE.C.7a: Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions.
8.EE.C.7b: Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.</td><td colspan="2">Transfer</td></tr>
<tr><td colspan="2">Students will develop a deep understanding of linear equations and systems of linear equations. They will explore the concepts of slope, y-intercept, and solution sets, and apply them to real-world situations. Students will learn how to graph linear equations, solve linear equations algebraically, and solve systems of linear equations using various methods.</td></tr>
<tr><td colspan="2">Meaning</td></tr>
<tr><td>UNDERSTANDINGS
● Students will understand the relationship between the equation of a line and its graphical representation.
● Students will understand how to solve linear equations algebraically and interpret the solutions.
● Students will understand the concept of a system of linear equations and different methods for solving them.
● Students will understand the different types of solution sets for systems of linear equations.</td><td>ESSENTIAL QUESTIONS:

How can linear equations be represented graphically and algebraically?
What are the methods for solving linear equations, and how can we interpret the solutions?
What is a system of linear equations, and how can we solve them?
How can we apply linear equations and systems to solve real-world problems?</td></tr>
<tr><td colspan="2">Acquisition</td></tr>
<tr><td>Students will know how to solve linear equations and systems, interpret the solutions in context, and apply their knowledge to analyze and solve problems.
<u>Vocabulary:</u>

System of Equations
Substitution Method
Elimination Method
Graphing Method</td><td>Students will be skilled at
-the value/values of the variables that make the equation true.
-Distributive property and simplifying equations
-the possibilities of a system having a unique solution, no solution, or infinitely many solutions.</td></tr>
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	Solution Set Linear Inequality Standard Form Slope-Intercept Form	