**Enhanced Algebra: Concepts & Connections – Jabal Moss**

**Lesson Plan Week of February 24 - 28, 2025**

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| **Standards** | **8.FGR.7 Justify and use various strategies to solve systems of linear equations to model and explain real-life phenomena.** * **8.FGR.7.1** Interpret and solve relevant mathematical problems leading to two linear equations in two variables.
* **8.FGR.7.2** Show and explain that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because the points of intersection satisfy both equations simultaneously.
* **8.FGR.7.3** Approximate solutions of two linear equations in two variables by graphing the equations and solving simple cases by inspection.
* **8.FGR.7.4** Analyze and solve systems of two linear equations in two variables algebraically to find exact solutions.
* **8.FGR.7.5** Create and compare the equations of two lines that are either parallel to each other, perpendicular to each other, or neither parallel nor perpendicular.

**A.PAR.4 Create, analyze, and solve linear inequalities in two variables and systems of linear inequalities to model real-life phenomena.** * **A.PAR.4.1** Create and solve linear inequalities in two variables to represent relationships between quantities including mathematically applicable situations; graph inequalities on coordinate axes with labels and scales.
* **A.PAR.4.2** Represent constraints of linear inequalities and interpret data points as possible or not possible.
* **A.PAR.4.3** Solve systems of linear inequalities by graphing, including systems representing a mathematically applicable situation.

**MP.1 Make sense** of problems and **persevere** in solving them. **MP.2**: **Reason** abstractly and quantitatively, **MP.4**: **Model** with mathematics, **MP.7** **Look for** and **make use** of structure.**MP.1 Make sense** of problems and **persevere** in solving them. **MP.2**: **Reason** abstractly and quantitatively, **MP.4**: **Model** with mathematics, **MP.7** **Look for** and **make use** of structure. |
| **Vocabulary** |  |
| **District/State Assessment:** | **Formative Assessment:** | **Summative Assessment:** |
| [ ] CMA1[ ] CMA2[ ] CMA3 | [ ] iReady Diagnostic[ ] GMAs | [ ] Quiz[x] Quick Write[x] Check for Understanding | [ ] Performance Task[ ] Up and Stuck[x] Exit Ticket | [ ] Unit Test[ ] Mid Unit Test[ ] Vocabulary Test | [ ] Project[ ] Culminating Task |
|  | **Learning Target** | **Engage** | **Explore/Explain** | **Apply** | **Reflect** | **Success Criteria** |
| **Monday** **(02/24)** | **I AM LEARNING TO…****GRAPH** linear inequalities in two variables and **DETERMINE** the solutions by analyzing the graph. | **DO NOW:**Number Sense Routine**ENGAGE:**Error Analysis  | **EXPLORE**:Different Forms of Inequalities (Slope-Intercept Form and Standard Form)  | **EXTEND:**Station Rotation-**Independent Station:**More Practice Task**Reteach Station:**Misconceptions Roundtable**Technology Station:**Progress Learning  | **EVALUATE**:5-question assessment | **I CAN EXPLAIN how to…****WRITE** an inequality in slope-intercept and standard form; **CORRECTLY** graph the boundary line for a linear inequality and **DETERMINE** and **SHADE** the appropriate half-plane. |
| **Tuesday** **(02/25)** | **I AM LEARNING TO…****WRITE and GRAPH** systems of linear inequalities, **SOLVE** real-world phenomena,and **DETERMINE** the solution region. | **DO NOW:**Number Sense Routine**ENGAGE:**CREATE-THINK-PAIR-SHARE Activity | **EXPLORE:**SPARK YOUR LEARNING – Arcade Games Task | **APPLY:**Build Understanding Task (Problems 1-4) | **REFLECT:**HMH - Check for Understanding  | **I CAN EXPLAIN how to…****WRITE and GRAPH** linear inequalities, **FIND** the overlapping region that satisfies both inequalities, and **VERIFY** whether specific points are solutions. |
| **Wednesday** **(02/26)** | **I AM LEARNING TO…****WRITE and GRAPH** systems of linear inequalities, **SOLVE** real-world phenomena,and **DETERMINE** the solution region. | **DO NOW:**Number Sense Routine**ENGAGE:**  From Standard Form to Slope-Intercept Form Practice | **EXPLORE:**One-Page Reteach Lesson | **EXTEND:**Station Rotation-**Independent Station:**More Practice Task**Reteach Station:**Misconceptions Roundtable**Technology Station:**Progress Learning | **REFLECT:**5 question assessment | **I CAN EXPLAIN how to…****WRITE and GRAPH** linear inequalities, **FIND** the overlapping region that satisfies both inequalities, and **VERIFY** whether specific points are solutions. |
| **Thursday** **(02/27)** | **I AM LEARNING TO…****JUSTIFY and USE** multiple strategies to solve systems of linear equations and inequalities, both graphically and algebraically, to **MODEL and EXPLAIN** real-world phenomena. | **DO NOW:**Number Sense Routine**ENGAGE:**Guided Discussion | **EXPLORE**:Create real-life phenomena using system of equations and inequalities to build an understanding task.  | **EXTEND:**Unit Review Guide (Work in Groups) | **EVALUATE**:Up and Stuck Challenge | **I CAN EXPLAIN how to…****SOLVE** systems of linear equations by finding the intersection point; **UNDERSTAND** that the intersection point represents the common solution for both equations; **CREATE** systems (linear and inequalities) for real-life phenomena and **CONSTRUCT** parallel and perpendicular lines. |
| **Friday****(02/28)** | **I AM LEARNING TO…****SHOW** what I know as it relates to solving systems of linear equations and inequalities.  | **DO NOW:**Number Sense Routine**ENGAGE:**Questions and Answers | **EXPLAIN:**Unit Assessment | **APPLY:**Unit Assessment | **REFLECT:**Unit Assessment | **I CAN EXPLAIN how to…****SOLVE** systems of linear equations and inequalities.  |

**Study Skills…**

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|  | **Teacher Led** | **Personalized Learning** | **Student Station** |
| **Monday****(02/24)** | Skill Building Station | i-Ready Reading Pathway | Silent Reading/Make-up Work |
| **Tuesday****(02/25)** | Skill Building Station | i-Ready Reading Pathway | Silent Reading/Make-up Work |
| **Wednesday****(02/26)** | Team 8A Data Chats | Team 8A Data Chats | Team 8A Data Chats |
| **Thursday****(02/27)** | Understanding Solving Equations | i-Ready Math Lesson | Silent Reading/Make-up Work |
| **Friday****(02/28)** | Understanding Solving Equations | i-Ready Math Lesson | Silent Reading/Make-up Work |