**Lesson Plan**

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| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/19/12 |

**Part I**

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| --- | --- |
| **Unit:** | Solving Systems of Equations |
| **Benchmark:** | MA.912.A.3.14, MA.912.A.3.15 |
| **Literacy Benchmark:** | LA.910.1.61 Use new vocabulary that is introduced and taught directly. |
| **Objective(s):**  **In student-friendly language** | Students will be able to:   * Solve systems of equations using the multiplication elimination method. * Write systems of equations of real-world problems. |
| **Essential Question:** | Why is it necessary to have different methods to solve systems of equations? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Student Homework, Exit Slip |
| **Key Vocabulary** | Elimination, variable |
| **Homework** | Kuta Software Solving Systems of Equations by Elimination  #13-24 Choose 6 |

**Part II**

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| **High-Yield Strategies:**  Check all that apply | **Marzano:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Identifiying Similarities and Differences |  | Summarizing |  | Nonlinguistic Representation | | x | Generating/Testing Hypotheses |  | Advance Organizer |  | Outlining/Webbing/Multi-Column Notemaking |   **Kagan Structures:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | RallyCoach |  | RallyRobin |  | RoundRobin | |  | Stand-Up Hand-Up Pair-Up |  | Quiz-Quiz Trade |  | Other: Numbered Heads Together |   **CRISS:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Think-Pair Share |  | KWL |  | Jigsaw | |  | Frayer Model |  | Anticipation Guide |  | Other: | |
| **Challenge Level (Bloom):**  Check all that apply  **Depth of Knowledge**  **(Webb):**  Check all that apply | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | X | Recall | X | Comprehension | X | Application | | X | Analysis |  | Synthesis |  | Evaluation |      |  |  |  |  | | --- | --- | --- | --- | | X | Level 1 (Recall) | X | Level 2 (Skill/Concept) | | X | Level 3 (Strategic Thinking) |  | Level 4 (Extended Thinking) | |

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| **Differentiation:**  Check all that apply | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | X | Content | X | Process | X | Product | X | Learning Environment | |

**Part III**

**Write Lesson Plan Here (Follow Phases of the Gradual Release Model)**

**Attach copies of advance organizers, handouts, assignments, Powerpoint or Notebook slides.**

* I will solve a system of equations using multiplication with the elimination method. (Slide 2 )
* We will solve a system of equations using multiplication with the elimination method. (Slide 3)
* They will solve a system of equations using multiplication with the elimination method. (Slide 4)
* We will solve a real-world system of equations using multiplication with the elimination method. (Slide 5)
* They will complete an exit slip. (Slide 6)

**Part IV**

**Higher Order Questions I will ask in this lesson (write them out):**

* How do you choose which variable to eliminate?

**Lesson Plan**

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| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/20/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Solving Systems of Equations |
| **Benchmark:** | MA.912.A.3.14, MA.912.A.3.15 |
| **Literacy Benchmark:** | LA.910.1.61 Use new vocabulary that is introduced and taught directly. |
| **Objective(s):**  **In student-friendly language** | Students will be able to:   * Solve systems of equations using elimination method. * Write math sentences to represent systems of equations. |
| **Essential Question:** | Why is it necessary to have different methods to solve systems of equations? |
| **Materials/Resources:** | Calculators, Smart Board, Student Notes |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Student Homework, Exit Slip |
| **Key Vocabulary** | Elimination, variable |
| **Homework** | Kuta Software Solving Systems of Equations by Elimination  #13-24 Choose 6 |

**Part II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **High-Yield Strategies:**  Check all that apply | **Marzano:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Identifiying Similarities and Differences |  | Summarizing |  | Nonlinguistic Representation | | X | Generating/Testing Hypotheses |  | Advance Organizer |  | Outlining/Webbing/Multi-Column Notemaking |   **Kagan Structures:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | RallyCoach |  | RallyRobin |  | RoundRobin | |  | Stand-Up Hand-Up Pair-Up |  | Quiz-Quiz Trade | X | Other: Numbered Heads Together |   **CRISS:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Think-Pair Share |  | KWL |  | Jigsaw | |  | Frayer Model |  | Anticipation Guide |  | Other: | |
| **Challenge Level (Bloom):**  Check all that apply  **Depth of Knowledge**  **(Webb):**  Check all that apply | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | X | Recall | X | Comprehension | X | Application | | X | Analysis |  | Synthesis |  | Evaluation |      |  |  |  |  | | --- | --- | --- | --- | | X | Level 1 (Recall) | X | Level 2 (Skill/Concept) | |  | Level 3 (Strategic Thinking) |  | Level 4 (Extended Thinking) | |

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| **Differentiation:**  Check all that apply | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | X | Content | X | Process | X | Product | X | Learning Environment | |

**Part III**

**Write Lesson Plan Here (Follow Phases of the Gradual Release Model)**

**Attach copies of advance organizers, handouts, assignments, Powerpoint or Notebook slides.**

* They will work in groups to answer review questions. (Slide 9, 10)
* We will go over a problem. (Slide 8 )
* They will work in groups to answer review questions. (Slide 12, 13 )
* We will go over a problem. (Slide 11)
* They will work in groups to answer review questions. (Slide 15, 16)
* We will go over a problem. (Slide 14)
* They will complete an exit slip. (Slide 17)

**Part IV**

**Higher Order Questions I will ask in this lesson (write them out):**

* How can the elimination method be useful in real-world situations?

**Lesson Plan**

|  |  |  |
| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/21/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Solving Systems of Equations |
| **Benchmark:** | MA.912.A.3.14, MA.912.A.3.15 |
| **Literacy Benchmark:** | LA.910.1.61 Use new vocabulary that is introduced and taught directly. |
| **Objective(s):**  **In student-friendly language** | Students will be able to:   * Solve systems of equations using elimination method. * Write math sentences to represent systems of equations. |
| **Essential Question:** | Why is it necessary to have different methods to solve systems of equations? |
| **Materials/Resources:** | Calculators, Smart Board, Quiz |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Quiz |
| **Key Vocabulary** | Elimination, variable |
| **Homework** | None |

**Part II**

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| **High-Yield Strategies:**  Check all that apply | **Marzano:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Identifiying Similarities and Differences |  | Summarizing |  | Nonlinguistic Representation | |  | Generating/Testing Hypotheses |  | Advance Organizer |  | Outlining/Webbing/Multi-Column Notemaking |   **Kagan Structures:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | RallyCoach |  | RallyRobin |  | RoundRobin | |  | Stand-Up Hand-Up Pair-Up |  | Quiz-Quiz Trade |  | Other: Numbered Heads Together |   **CRISS:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Think-Pair Share |  | KWL |  | Jigsaw | |  | Frayer Model |  | Anticipation Guide |  | Other: | |
| **Challenge Level (Bloom):**  Check all that apply  **Depth of Knowledge**  **(Webb):**  Check all that apply | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Recall |  | Comprehension |  | Application | |  | Analysis |  | Synthesis |  | Evaluation |      |  |  |  |  | | --- | --- | --- | --- | |  | Level 1 (Recall) |  | Level 2 (Skill/Concept) | |  | Level 3 (Strategic Thinking) |  | Level 4 (Extended Thinking) | |

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| **Differentiation:**  Check all that apply | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | Content |  | Process |  | Product |  | Learning Environment | |

**Part III**

**Write Lesson Plan Here (Follow Phases of the Gradual Release Model)**

**Attach copies of advance organizers, handouts, assignments, Powerpoint or Notebook slides.**

* I will review homework questions. (Slide 19)
* Students will take a quiz. (Slide 20)

**Part IV**

**Higher Order Questions I will ask in this lesson (write them out):**

**Lesson Plan**

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| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/22/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Solving Systems of Equations |
| **Benchmark:** | MA.912.A.3.13, MA.912.A.3.14, MA.912.A.3.15, |
| **Literacy Benchmark:** | LA.910.1.61 Use new vocabulary that is introduced and taught directly. |
| **Objective(s):**  **In student-friendly language** | Students will be able to:   * Review graphing, substitution and elimination methods for solving systems of equations. * Present problems to classmates. |
| **Essential Question:** | Why is it necessary to have different methods to solve systems of equations? |
| **Materials/Resources:** | Calculators, Smart Board, Review Booklets |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Student Homework, Exit Slip |
| **Key Vocabulary** | Elimination, variable |
| **Homework** | 6-5 Skills Practice WS |

**Part II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **High-Yield Strategies:**  Check all that apply | **Marzano:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Identifiying Similarities and Differences |  | Summarizing |  | Nonlinguistic Representation | |  | Generating/Testing Hypotheses |  | Advance Organizer | X | Outlining/Webbing/Multi-Column Notemaking |   **Kagan Structures:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | RallyCoach |  | RallyRobin |  | RoundRobin | |  | Stand-Up Hand-Up Pair-Up |  | Quiz-Quiz Trade | X | Other: Numbered Heads Together |   **CRISS:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Think-Pair Share |  | KWL |  | Jigsaw | |  | Frayer Model |  | Anticipation Guide |  | Other: | |
| **Challenge Level (Bloom):**  Check all that apply  **Depth of Knowledge**  **(Webb):**  Check all that apply | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | X | Recall | X | Comprehension | X | Application | | X | Analysis |  | Synthesis |  | Evaluation |      |  |  |  |  | | --- | --- | --- | --- | | X | Level 1 (Recall) | X | Level 2 (Skill/Concept) | | X | Level 3 (Strategic Thinking) |  | Level 4 (Extended Thinking) | |

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| **Differentiation:**  Check all that apply | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | X | Content | X | Process |  | Product | x | Learning Environment | |

**Part III**

**Write Lesson Plan Here (Follow Phases of the Gradual Release Model)**

**Attach copies of advance organizers, handouts, assignments, Powerpoint or Notebook slides.**

* We will review the strategies for solving systems of equations. (Slide 22)
* They will work with their team to answer a specific problem. (Slide 23-29)
* They will present their solution to their classmates.
* They will complete an exit slip. (Slide 30)

**Part IV**

**Higher Order Questions I will ask in this lesson (write them out):**

* How do you determine which method to use when?

**Lesson Plan**

|  |  |  |
| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/23/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Solving Systems of Equations |
| **Benchmark:** | MA.912.A.3.13, MA.912.A.3.14, MA.912.A.3.15, |
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| **Objective(s):**  **In student-friendly language** | Students will be able to:   * Solve systems of equations using graphing, substitution, and elimination methods. |
| **Essential Question:** | Why is it necessary to have different methods to solve systems of equations? |
| **Materials/Resources:** | Calculators, Smart Board, Test |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Test |
| **Key Vocabulary** | Elimination, variable |
| **Homework** | None |

**Part II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **High-Yield Strategies:**  Check all that apply | **Marzano:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Identifiying Similarities and Differences |  | Summarizing |  | Nonlinguistic Representation | |  | Generating/Testing Hypotheses |  | Advance Organizer |  | Outlining/Webbing/Multi-Column Notemaking |   **Kagan Structures:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | RallyCoach |  | RallyRobin |  | RoundRobin | |  | Stand-Up Hand-Up Pair-Up |  | Quiz-Quiz Trade |  | Other: Numbered Heads Together |   **CRISS:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Think-Pair Share |  | KWL |  | Jigsaw | |  | Frayer Model |  | Anticipation Guide |  | Other: | |
| **Challenge Level (Bloom):**  Check all that apply  **Depth of Knowledge**  **(Webb):**  Check all that apply | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Recall |  | Comprehension |  | Application | |  | Analysis |  | Synthesis |  | Evaluation |      |  |  |  |  | | --- | --- | --- | --- | |  | Level 1 (Recall) |  | Level 2 (Skill/Concept) | |  | Level 3 (Strategic Thinking) |  | Level 4 (Extended Thinking) | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Differentiation:**  Check all that apply | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | Content |  | Process |  | Product |  | Learning Environment | |

**Part III**

**Write Lesson Plan Here (Follow Phases of the Gradual Release Model)**

**Attach copies of advance organizers, handouts, assignments, Powerpoint or Notebook slides.**

* Students will individually complete a test. (Slide 32)

**Part IV**

**Higher Order Questions I will ask in this lesson (write them out):**