**Lesson Plan**

|  |  |  |
| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/26/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Systems of Linear Equations and Inequalities – Systems of Inequalities |
| **Benchmark:** | MA.912.A.3.14 moderate, MA.912.A.3.15 high |
| **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:   * Explain how to find solutions to systems of inequalities and how they are related to graphing inequalities and systems of equations. * Graph systems of inequalities. |
| **Essential Question:** | How are systems of equations useful in the real-world? |
| **Materials/Resources:** | Calculators, Smart Board, Student (group) handout |
| **Assessments:**  **Formative/Summative** | Formative: Observations, Discussions, Exit Slip  Summative: Student Homework |
| **Key Vocabulary** | System of Inequalities |
| **Homework** | 6-8 Practice WS # Evens |

**Part II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | X | 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 | X | Synthesis | X | Evaluation |      |  |  |  |  | | --- | --- | --- | --- | | X | Level 1 (Recall) | X | Level 2 (Skill/Concept) | | X | Level 3 (Strategic Thinking) |  | Level 4 (Extended Thinking) | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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.**

* I will review how to graphing an inequality and a system of equations. (slide 2)
* We will brainstorm how we would find solutions to a system of inequalities. (slide 2)
* I will graph a system of inequalities. (slide 3)
* We will graph a system of inequalities. (slide 4)
* They will graph a system of inequalities. (slide 5)
* They will work with their team to graph a given system of inequlities.
* They will turn in their group problem as a graded classwork.
* They will then complete an exit slip individually. (slide 6)

**Part IV**

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

* Will a system of inequalities have one single solution? Why/why not? What are the possibilities?
* How can we find solutions to systems of inequalities?

**Lesson Plan**

|  |  |  |
| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/27/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Systems of Linear Equations and Inequalities – Systems of Inequalities |
| **Benchmark:** | MA.912.A.3.14 moderate, MA.912.A.3.15 high |
| **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:   * Graph systems of inequalities. * Apply graphing systems of inequality knowledge to real-world problem. |
| **Essential Question:** | How are systems of equations useful in the real-world? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: Observations, Discussions, Exit Slip  Summative: Student Homework |
| **Key Vocabulary** | System of Inequalities |
| **Homework** | 6-8 Practice WS # Odds |

**Part II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **High-Yield Strategies:**  Check all that apply | **Marzano:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | X | 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 | 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) | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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.**

* I will review how to graph systems of inequalities. (slide 8)
* They will graph a system of inequalities. (slide 9)
* We will form inequalities to reflect the real-world problem. (slide 10)
* They will graph the system of inequalities. (slide 10)
* We will discuss possible solutions to the system. (slide 10)
* They will individually complete an exit slip. (slide 11)

**Part IV**

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

* How can you write out the system of equations when only given the graph?
* Are there times when there is no solution to a system of inequalities? Provide an example of this.

**Lesson Plan**

|  |  |  |
| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/28/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Factoring and Quadratic Equations – Monomials and Factoring |
| **Benchmark:** | MA.5.A.2.4 moderate |
| **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:   * Factor monomials.. * Find the greatest common factor of pairs of monomials. |
| **Essential Question:** | If the reverse of FOIL method was performed on a trinomial, what would be the result? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: Observations, Discussions, Exit Slip  Summative: Student Homework |
| **Key Vocabulary** | factored form, greatest common factor |
| **Homework** | 8-1 Practice # Evens |

**Part II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | |  | Analysis |  | Synthesis |  | Evaluation |      |  |  |  |  | | --- | --- | --- | --- | | X | Level 1 (Recall) | X | Level 2 (Skill/Concept) | |  | Level 3 (Strategic Thinking) |  | Level 4 (Extended Thinking) | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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.**

* I will review what it means to factor (prime factorization). (slide 13)
* We will factor monomials. (slide 13)
* They will factor monomials in their groups. (slide 14)
* I will introduce greatest common factor and show an example of finding the GCF. (slide 15)
* We will find the GCF of pairs of monomials. (slide 15)
* They will find the GCF of pairs of monomials. (slide 16)
* They will complete an exit slip, individually. (slide 17)

**Part IV**

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

* What does it mean to factor something?
* Why would we want to factor something into its most basic parts?
* How does the GCF relate to factoring?

**Lesson Plan**

|  |  |  |
| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/29/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Factoring and Quadratic Equations – Monomials and Factoring |
| **Benchmark:** | MA.912.A.3.2 moderate, MA.912.A.4.3 moderate |
| **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:   * Factor and find the greatest common factor of more than a pair of monomials. * Find the greatest common factor in real-world scenarios. |
| **Essential Question:** | If the reverse of FOIL method was performed on a trinomial, what would be the result? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: Observations, Discussions, Graded Classwork  Summative: Student Homework |
| **Key Vocabulary** | factored form, greatest common factor |
| **Homework** | None |

**Part II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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) | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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.**

* We will extend our factoring to include a third term. (slide18)
* We will read and talk about the real-world problem. (slide 19)
* They will work in their groups to find how many complete kits can be made.(slide 19)
* They will work in pairs to write a story problem/real-world scenario similar to slide 19.
* They will switch papers with the other pair in their team and will attempt to solve the problem. This task will be a graded classwork.

**Part IV**

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

* How would it be different to find the GCF when there are more than 2 terms?
* Make a real-world problem of your own./Solve a real-world problem of your own.

**Lesson Plan**

|  |  |  |
| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 03/30/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | None – No School Friday March 30th 2012 |
| **Benchmark:** |  |
| **Literacy Benchmark:** |  |
| **Objective(s):**  **In student-friendly language** | Students will be able to: |
| **Essential Question:** |  |
| **Materials/Resources:** |  |
| **Assessments:**  **Formative/Summative** | Formative:  Summative: |
| **Key Vocabulary** |  |
| **Homework** | None |

**Part II**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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) | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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.**

**Part IV**

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