**Lesson Plan**

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| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 04/09/12 |

**Part I**

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| --- | --- |
| **Unit:** | Chapter 8 – Factoring and Quadratic Equations |
| **Benchmark:** | MA.912.A.4.3, moderate  MA.912.A.3.2, 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:   * Use the distributive property to factor polynomials containing all positive terms. |
| **Essential Question:** | If the reverse of the FOIL method was performed on a trinomial, what would result? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Student Homework |
| **Key Vocabulary** | Factoring, GCF |
| **Homework** | 8-2 Using the Distributive Property to Factor #1-8 - Choose 6 |

**Part II**

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| **High-Yield Strategies:**  Check all that apply | **Marzano:**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | 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 |  | 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 begin with a review of GCF. (slide 2-4)
* We will review the distributive property. (slide 5-6)
* I will apply the distributive property to factoring. (slide 7)
* We will apply the distributive property to factoring. (slide 8)
* They will apply the distributive property to factoring. (slide 9)
* They will complete an exit slip. (slide 10)

**Part IV**

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

* How could we reverse what we know about the distributive property?
* Using our knowledge of GCF and the distributive property, how might we go about factoring this polynomial?
* Why do we want to find the GCF of both terms?
* How can we check that our answer is correct?

**Lesson Plan**

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| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 04/10/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Chapter 8 – Factoring and Quadratic Equations |
| **Benchmark:** | MA.912.A.4.3, moderate  MA.912.A.3.2, 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:   * Use the distributive property to factor polynomials with negative terms and more than 2 terms. |
| **Essential Question:** | If the reverse of the FOIL method was performed on a trinomial, what would result? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Student Homework |
| **Key Vocabulary** | factoring |
| **Homework** | 8-2 Using the Distributive Property to Factor #9-16 - 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 | X | 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.**

* They will work with their teams to match the answer to their polynomial. (slide 12)
* I will use the distributive property to factor polynomials with negative terms. (slide 13)
* We will use the distributive property to factor a polynomial with negative terms.(slide 14)
* They will use the distributive property to factor a polynomial with negative terms and 3 total terms. (slide 15)
* We will discuss and solve the real-world swimming pool problem. (slide 16)
* They will complete an exit slip. (slide 17)

**Part IV**

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

* How do we deal with the negative terms?
* What changes when we have polynomials with more than 2 terms?

**Lesson Plan**

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| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 04/11/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Chapter 8 – Factoring and Quadratic Equations |
| **Benchmark:** | MA.912.A.4.3, moderate  MA.912.A.3.2, 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 by grouping polynomials with 4 terms. * Rearrange terms to group properly. |
| **Essential Question:** | If the reverse of the FOIL method was performed on a trinomial, what would result? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Student Homework |
| **Key Vocabulary** | Factoring, factor by grouping |
| **Homework** | 8-2 Using the Distributive Property to Factor #17-24 - 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 | x | 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.**

* We will discuss the pictures and how they can be grouped. (slide 19)
* I will discuss an example of using factor by grouping. (slide 20)
* We will discuss the rules for using factor by grouping method. (slide 21)
* We will factor by grouping. (slide 22)
* They will factor by grouping. (slide 23-24)
* They will do an exit slip. (slide 25)

**Part IV**

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

* How is factoring by grouping similar/different from what we have been doing?
* Why is it necessary to have 4 terms to factor by grouping?

**Lesson Plan**

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| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 04/12/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Chapter 8 – Factoring and Quadratic Equations |
| **Benchmark:** | MA.912.A.4.3, moderate  MA.912.A.3.2, 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 by grouping with negative terms. |
| **Essential Question:** | If the reverse of the FOIL method was performed on a trinomial, what would result? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: Observations and Discussions  Summative: Student Homework |
| **Key Vocabulary** | Factoring, factor by grouping |
| **Homework** | 8-2 Using the Distributive Property to Factor #25-32 - 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 | x | 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 review an example of factoring by grouping. (slide 27)
* We will factor by grouping. (slide 28)
* They will factor by grouping. (slide 29)
* They will do quiz-quiz-trade to review section 8-1 and the beginning of 8-2. (slide 30)

**Part IV**

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

* What should be careful of when we see negative terms? How will we work with these?

**Lesson Plan**

|  |  |  |
| --- | --- | --- |
| **Teacher Name:** Heather McNeill | **Course:** Algebra 1 Standard | **Date:** 04/13/12 |

**Part I**

|  |  |
| --- | --- |
| **Unit:** | Chapter 8 – Factoring and Quadratic Equations |
| **Benchmark:** | MA.912.A.4.3, moderate  MA.912.A.3.2, 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:   * Take a quiz on the beginning of 8-2. |
| **Essential Question:** | If the reverse of the FOIL method was performed on a trinomial, what would result? |
| **Materials/Resources:** | Calculators, Smart Board |
| **Assessments:**  **Formative/Summative** | Formative: none  Summative: Quiz |
| **Key Vocabulary** | Factoring, factor by grouping |
| **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 take a quiz.

**Part IV**

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