

PCSD Lesson Planning Template

<u>Grade Level</u> 9th Algebra I		<u>Teacher/Room</u> : L. Weyman/Room 183		Week of: May 8 – May 12, 2017	
Unit Vocabulary: see attached					
Instructional Strategies Used: direct instruction, independent study, interactive instruction, partners					
<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	<u>Day 4</u>	<u>Day 5</u>	
GSE Standard(s): Unit 4 Standards	GSE Standard(s): Unit 5 Standards	GSE Standard(s): Unit 6 Standards.	GSE Standard(s): All standards.	GSE Standard(s): All Standards	
EQ Question: What are the relationships between quantities and expressions?	EQ Question: How do I solve and graph linear equations and inequalities?	EQ Question: How do I solve and graph quadratic functions?	EQ Question: All essential questions	EQ Question: All essential quesitons	
Mini Lesson: Weekly Review Activating Strategies: Milestone Practice Questions Lesson: Unit 4 Review Resource/Materials: Review Packet	Mini Lesson: Weekly Review Activating Strategies: Milestone Practice Questions Lesson: Unit 5 Review Resource/Materials: Review Packet	Mini Lesson: Weekly Review Activating Strategies: Milestone Practice Questions Lesson: Unit 6 Review Resource/Materials: Review Packet	Milestone	Mini Lesson: Activating Strategies: Project Resource/Materials: Textbooks, paper, markers, crayons	
Differentiation: <i>Content/Process/Product:</i> <i>Grouping Strategy:</i> <i>Assessment:</i>	Differentiation: <i>Content/Process/Product:</i> <i>Grouping Strategy:</i> <i>Assessment:</i>	Differentiation: <i>Content/Process/Product:</i> <i>Grouping Strategy:</i> <i>Assessment:</i>	Differentiation: <i>Content/Process/Product:</i> <i>Grouping Strategy:</i> <i>Assessment:</i>	Differentiation: <i>Content/Process/Product:</i> <i>Grouping Strategy:</i> <i>Assessment:</i>	
Assessment : <i>Formative:</i> thumbs up/down <i>Summative:</i>	Assessment : <i>Formative:</i> thumbs up/down <i>Summative:</i>	Assessment : <i>Formative:</i> thumbs up/down <i>Summative:</i>	Assessment : <i>Formative:</i> <i>Summative:</i>	Assessment : <i>Formative:</i> <i>Summative:</i>	
Homework: Unit 4Practice	Homework: Unit 5 Practice	Homework: Unit 6 Practice	Homework: none	Homework: none	

- **Complete factorization over the integers.** Writing a polynomial as a product of polynomials so that none of the factors is the number 1, there is at most one factor of degree zero, each polynomial factor has degree less than or equal to the degree of the product polynomial, each polynomial factor has all integer coefficients, and none of the factor polynomial can be written as such a product.
- **Completing the square.** Completing the Square is the process of converting a quadratic equation into a perfect square trinomial by adding or subtracting terms on both sides.
- **Difference of two squares.** A squared (multiplied by itself) number subtracted from another squared number. It refers to the identity $a^2 - b^2 = (a + b)(a - b)$ in elementary algebra.
- **Discriminant of a quadratic equation.** The discriminant of a quadratic equation of the form $ax^2 + bx + c = 0$, $a \neq 0$, is the number $b^2 - 4ac$.
- **Horizontal shift.** A rigid transformation of a graph in a horizontal direction, either left or right.
- **Perfect square trinomial.** A trinomial that factors into two identical binomial factors.
- **Quadratic equation.** An equation of degree 2, which has at most two solutions.
- **Quadratic function.** A function of degree 2 which has a graph that “turns around” once, resembling an umbrella-like curve that faces either right-side up or upside down. This graph is called a parabola.
- **Root.** The x-values where the function has a value of zero.
- **Standard form of a quadratic function.** $ax^2 + bx + c$
- **Vertex.** The maximum or minimum value of a parabola, either in terms of y if the parabola is opening up or down, or in terms of x if the parabola is opening left or right.
- **Vertex form of a quadratic function.** A formula for a quadratic equation of the form $f(x) = a(x - h)^2 + k$, where a is a nonzero constant and the vertex of the graph is the point (h, k) .