

Centerville Jr. High School Curriculum Mapping - Summer 2015

Algebra 1A

Mr. Brian Cheek

1st Semester

Unit/Chapter/Lesson	Indiana Standards (2014)	Common Core Standards	Key Questions	Resources/Activities	Vocabulary	Assessments
Unit 1 Lesson 1	MA.7.C.8, MA.7.AF.1, MA.A1.PS.2		In what order do we perform arithmetic operations to evaluate them?	Notetaking Guide, Notes, Mathweb Links	Order of Operations	Homework, Class Observations, Technological Assessment
Unit 1 Lesson 2	MA.A1.L.9		What are opposite numbers? How do we represent absolute value on a number line?	Notetaking Guide, Notes, Mathweb Links	Opposite numbers, absolute value	Homework, Class Observations, Technological Assessment
Unit 1 Lesson 3	MA.7.C.1		How do we perform operations on positive and negative numbers?	Notetaking Guide, Notes, Mathweb Links	Unit multiplier	Homework, Class Observations, Technological Assessment
Unit 1 Lesson 4	MA.7.C.3	A-SSE.1	What are the rules for combining like terms? How do we evaluate algebraic expressions?	Notetaking Guide, Notes, Mathweb Links	Algebraic expression	Homework, Class Observations, Technological Assessment
Unit 1 Lesson 5	MA.7.PS.7, MA.A1.PS.7, MA.7.C.3, MA.7.AF.1	A-SSE.1	How do we distribute negative numbers across parentheses?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Written Assessment
Unit 2 Lesson 1	MA.A1.L.2, MA.A1.PS.2, MA.A1.L.1	A-CED.1, A-REI.1, A-REI.3	How do we solve 1-step equations?	Notetaking Guide, Notes, Mathweb Links	Equation	Homework, Class Observations, Technological Assessment

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Unit 2 Lesson 2	MA.A1.L.2, MA.A1.PS.2, MA.A1.L.1	A-CED.1, A-REI.1, A-REI.3	How do we solve 2-step equations?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 2 Lesson 3	MA.A1.L.2, MA.A1.PS.2, MA.A1.L.1	A-CED.1, A-REI.1, A-REI.3	In what order to we perform the steps to solve multi-step equations? How do we combine like terms when we solve equations?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 2 Lesson 4	MA.A1.L.2, MA.A1.PS.2, MA.A1.L.1	A-CED.1, A-REI.1, A-REI.3	How do we solve equations with variables on both sides?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Written Assessment
Unit 3 Lesson 1	MA.A1.L.2, MA.A1.L.1, MA.A1.L.7, MA.A1.SEI.3	A-CED.1, A-CED.3	How do we graphically represent inequalities? How do we translate real-world problems into mathematical inequalities?	Notetaking Guide, Notes, Mathweb Links	Inequality	Homework, Class Observations, Technological Assessment, Tests, Timings
Unit 3 Lesson 2	MA.A1.L.2	A-CED.1	How do we solve linear inequalities?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Written Assessment
Unit 4 Lesson 1	MA.A1.L.5		How do we translate real-world problems into algebraic equations?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment

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Unit 4 Lesson 2	MA.A1.L.5		How can we algebraically represent perimeter and area problems to solve them?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 4 Lesson 3	MA.A1.L.5		How can we algebraically represent percent problems to solve them?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 4 Lesson 4	MA.A1.L.5			Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 4 Lesson 5	MA.A1.L.11, MA.A1.PS.2	A-CED.4	How do we isolate one variable in an equations that has multiple variables?	Notetaking Guide, Notes, Mathweb Links	Abstract equation	Homework, Class Observations, Technological Assessment, Written Assessment
Unit 5 Lesson 1			What does it mean to reflect or translate a geometric object on a coordinate plane?	Notetaking Guide, Notes, Mathweb Links	Reflection, translation, coordinate plane	Homework, Class Observations, Technological Assessment
Unit 5 Lesson 2	MA.A1.F.1, MA.A1.F.3	F-IF.1, F-IF.5	How do we find the domain and range of a relation?	Notetaking Guide, Notes, Mathweb Links	Relation	Homework, Class Observations, Technological Assessment

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Unit 5 Lesson 3	MA.A1.F.4	F-IF.5	How do we determine if a relation is a function?	Notetaking Guide, Notes, Mathweb Links	Function	Homework, Class Observations, Technological Assessment
Unit 5 Lesson 4	MA.A1.F.4	F-IF.5		Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Tests, Timings
Unit 5 Lesson 5	MA.A1.DS.3, MA.A1.L.5	S-ID.7	How do we translate real-world problems into functions? How do we interpret the rate of change of a mathematical problem in real-world terms?	Notetaking Guide, Notes, Mathweb Links	Rate of change	Homework, Class Observations, Technological Assessment
Unit 5 Lesson 6	MA.A1.F.2	S-ID.6.b	How do we graph functions? Which of the variables are independent and which are dependent?	Notetaking Guide, Notes, Mathweb Links	Independent variable, dependent variable	Homework, Class Observations, Technological Assessment, Written Assessment

2nd Semester

Unit 6 Lesson 1	MA.A1.L.4, MA.A1.L.5	S-ID.7	How do we use a graphing calculator to plot points and draw a line?	Notetaking Guide, Notes, Mathweb Links	Linear function	Homework, Class Observations, Technological Assessment
Unit 6 Lesson 2	MA.A1.L.4, MA.A1.L.5	S-ID.7	How do we calculate and interpret slope?	Notetaking Guide, Notes, Mathweb Links	Slope	Homework, Class Observations, Technological Assessment

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Unit 6 Lesson 3	MA.A1.L.6		How do we graph a line given the a point on the line and its slope?	Notetaking Guide, Notes, Mathweb Links	Slope-intercept form	Homework, Class Observations, Technological Assessment
Unit 6 Lesson 4	MA.A1.L.6		How do we convert linear equations to slope intercept form? How do we verify the solutions to linear equations?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 6 Lesson 5	MA.A1.L.6		How do we find function rules given points in a table or chart?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 6 Lesson 6	MA.A1.PS.8		How do we interpret linear graphs in various real-world contexts?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 6 Lesson 7	MA.A1.SEI.4	A-REI.11	How can we evaluate and compare linear functions using a graphing calculator?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Written Assessment
Unit 7 Lesson 1	MA.A1.L.6		How do we write the equation of a line given the slope and another piece of information?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Tests, Timings

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Unit 7 Lesson 2	MA.A1.L.6		How do we write the equation of a line given two points? What is the equation of a vertical line? What is the equation of a horizontal line?	Notetaking Guide, Notes, Mathweb Links	Horizontal line, Vertical line	Homework, Class Observations, Technological Assessment
Unit 7 Lesson 3	MA.A1.L.6		How do we find the equations of parallel and perpendicular lines?	Notetaking Guide, Notes, Mathweb Links	Parallel lines, perpendicular lines	Homework, Class Observations, Technological Assessment
Unit 7 Lesson 4	MA.A1.L.2, MA.A1.L.6	A-CED.1	How can we use linear functions to model real-world problems?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Written Assessment
Unit 8 Lesson 1	MA.A1.L.4, MA.A1.L.5	S-ID.7	How can we determine the type of correlation between two variables?	Notetaking Guide, Notes, Mathweb Links	Scatter plot, correlation	Homework, Class Observations, Technological Assessment
Unit 8 Lesson 2	MA.A1.L.4, MA.A1.L.5, MA.A1.DS.3	A-REI.11, S-ID.7, S-ID.8	How do we perform linear regression on a set of data using a graphing calculator?	Notetaking Guide, Notes, Mathweb Links	Linear regression	Homework, Class Observations, Technological Assessment
Unit 8 Lesson 3	MA.A1.L.4, MA.A1.L.5, MA.A1.DS.2	S-ID.6.c, A-REI.11	How can we use a graphing calculator to interpret linear data?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Written Assessment

Unit/Chapter/Lesson	Indiana Standards (2014)	Common Core Standards	Key Questions	Resources/Activities	Vocabulary	Assessments
Unit 9 Lesson 1	MA.A1.PS.2, MA.AI.SEI.3	A-CED.2, A-REI.6, A-REI.10, A-REI.11	How do we interpret the solution to a system of linear equations?	Notetaking Guide, Notes, Mathweb Links	System of equations	Homework, Class Observations, Technological Assessment
Unit 9 Lesson 2	MA.A1.PS.2, MA.AI.SEI.3	A-CED.2, A-REI.6, A-REI.10, A-REI.11	How do we solve a system of two linear equations by graphing?	Notetaking Guide, Notes, Mathweb Links	Graphing method	Homework, Class Observations, Technological Assessment
Unit 9 Lesson 3	MA.A1.PS.2, MA.AI.SEI.3	A-CED.2, A-REI.6, A-REI.11	How do we solve a system of two linear equations by substitution?	Notetaking Guide, Notes, Mathweb Links	Substitution method	Homework, Class Observations, Technological Assessment
Unit 9 Lesson 4	MA.A1.PS.2, MA.AI.SEI.3	A-CED.2, A-REI.5, A-REI.6, A-REI.11	How do we solve a system of two linear equations by elimination?	Notetaking Guide, Notes, Mathweb Links	Elimination method	Homework, Class Observations, Technological Assessment, Tests, Timings
Unit 9 Lesson 5	MA.A1.PS.2, MA.AI.SEI.3	A-CED.2, A-REI.6, A-REI.11	How do we use a graphing calculator to solve a system of two equations?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment
Unit 9 Lesson 6	MA.A1.PS.2, MA.AI.SEI.3	A-CED.2, A-REI.6, A-REI.11	How do we solve real-world problems using systems of equations?	Notetaking Guide, Notes, Mathweb Links		Homework, Class Observations, Technological Assessment, Written Assessment

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Unit 10 Lesson 1	MA.A1.L.4		How do we model real-world problems using direct variation?	Notetaking Guide, Notes, Mathweb Links	Direct variation	Homework, Class Observations, Technological Assessment
Unit 10 Lesson 2	MA.A1.L.4		How do we model real-world problems using indirect variation? How do we distinguish between direct and indirect variation? How can we tell which type of variation is at work given a set of data?	Notetaking Guide, Notes, Mathweb Links	Inverse variation	Homework, Class Observations, Technological Assessment, Writing Assessment