

NORTH MAC MIDDLE SCHOOL
CURRICULUM GUIDE

Teacher Sara Floyd

Grade Level 7th Grade

Course Pre-Algebra Honors

Course Aims To prepare students for Algebra I.

Course Description

This course is designed for students who need the basic skills required for Algebra I. Topics covered will include set of numbers, order of operations with real numbers, algebraic expression, properties of equality, solving equations and inequalities, and graphing. A review of fractions, decimals, integers, percent's and proportions will also be covered. Basic geometry concepts will also be introduced.

Textbook:

Title: Prentice Hall: Pre-Algebra

ISBN: 978-0-13-365945-0

Authors: Charles, McNemar, Ramirez

Publisher: Pearson Education, Inc.

Publication Date: 2009

Assessment

There will be a minimum of 500 points scored each quarter. These points will be obtained from assignments, quizzes, chapter tests, and participation. The points will be distributed from each category from the range of percents given below.

Example

- Assignments 25%
- Portfolio/Notebook 5%
- Tests/Quizzes 70%

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QUARTER: _____1st Quarter_____

COURSE: _____Pre-Algebra Honors_____

<i>Content</i>	<i>Assessment</i>	<i>Common Core</i>	<i>Essential Questions</i>
<p>Chapter 1: Algebraic Expressions and Integers</p> <ul style="list-style-type: none"> • Variables and Expressions • Order of Operations • Writing and Evaluating Expressions • Integers and Absolute Value • Adding Integers • Subtracting Integers 	<p>Key: E: Even A: All EC: Extra Credit PR: Practice worksheet RT: Reteaching worksheet</p> <ul style="list-style-type: none"> • p. 6(2-22)E (46-52)E • p. 11(2-20)E (34-38)E 56,58 #60 EC • p. 13(1-12)A • p.16(2-26)E (38-44)E • PR 1-3 (1-11)A • p. 20(22-46)E (66-71)A • p. 27(6-20)E (42-48)A • p. 32(18-30)E (82-88)E #52EC • Quiz 1-1--1-6 	<p>7 NS 1a</p> <p>7 NS 1b</p> <p>7NS 1c</p> <p>7NS 1d</p> <p>7NS 3</p>	<p>Students will need to be able to answer/solve the following:</p> <p style="text-align: center;">Chapter 1</p> <ul style="list-style-type: none"> • Identify variables, numerical expressions, and variable expressions? • Write variable expressions for word phrases? • Use order of operations and grouping symbols? • Evaluate variable expressions? • Solve problems by evaluating expressions? • Represent, graph, and order integers? • Find opposites and absolute values? • Use models to add integers? • Use rules to add integers? • Use models to subtract integers? • Use rules to subtract integers?

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<ul style="list-style-type: none"> • Inductive Reasoning • Look for a Pattern • Multiplying and Dividing Integers • Coordinate Plane 	<ul style="list-style-type: none"> • PR 1-7 (1-11)A • p. 42 (1-5)A (9-17)A • PR 1-7 (M2) (1-33)A • p. 47 (12-28)E (73-79)A #72EC • p. 48 (42-56)E (68-71)A • p. 54 (14-50)E (72-80)E • Review p. 59 (1-57)A • Chapter 1 Test 	<p>7 RP</p> <p>7NS 2c</p> <p>7RP 2a</p> <p>7 RP 2d</p>	<ul style="list-style-type: none"> • Write rules for patterns? • Make conjectures and test conjectures? • Find number patterns and use number patterns in the real-world? • Multiply and divide integers using rules? • Name quadrants? • Graph points in the coordinate plane?
Chapter 2			
<p>Chapter 2: Solving One-Step Equations and Inequalities</p> <ul style="list-style-type: none"> • Properties of Numbers • Distributive Property • FOIL 	<ul style="list-style-type: none"> • PR 2-1 (1-25)A • p. 76 (18-29)A (56-60)E • RT 2-2 (1-11)A • Create 12 ?'s Project • Enrich ws 2-2 (1-7)A • p. 80 (12-30)E (36-44)E #38EC 	<p>7 NS 1c</p> <p>7 NS 2c</p> <p>7 NS 2b</p> <p>7 NS 2d</p>	<ul style="list-style-type: none"> • Identify properties of addition and multiplication? • Use the distributive property to solve problems? • Use the distributive property with algebraic expressions? • Identify parts of a variable expression? • Simplify Expressions? • Classify types of Equations? • Check equations using substitution?

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<ul style="list-style-type: none"> • Simplifying Variable Expressions • Variables and Equations • Solving Equations by Adding or Subtracting • Solving Equation by Multiplying and Dividing • Guess, Check, and Revise • Inequalities and Graphs • Solve One-Step Equations by Adding or Subtracting • Solve One-Step Equations by Multiplying or Dividing 	<ul style="list-style-type: none"> • PR 2-3 (1-14)A #13b EC • RT 2-3 • PR 2-4 (1-19)A #18 EC • p. 91 (2-20)E (47-56)A #46EC • RT 2-5 • Quiz 2-1--2-5 • p. 96 (2-20)E (62-66)E #44EC • p. 100 (1-7)A (18-26)A • p. 106(14-26)E (42-47)A • p. 110 (12-30)E • p.115 (2-24)E #54EC • Enrich ws 2-3 (1-18)A • Review p. 120 (20-53)A • Chapter 2 Test • Q1 Project for Pre-Algebra Hon. Class Due 	<p>7 NS 3</p> <p>7 EE 1</p> <p>7 EE 2</p> <p>7 EE 4</p> <p>7 EE 4a</p>	<ul style="list-style-type: none"> • Solve one-step equations using subtraction? • Solve one-step equations using addition? • Solve one-step equations using multiplication? • Solve one-step equations using division? • Solve a problem using the guess, check, and revise strategy? • Graph and write inequalities? • Solve one-step inequalities by adding and subtracting? • Solve one-step inequalities by multiplying or dividing?
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QUARTER: _____ 2nd Quarter _____

COURSE: _____ Pre-Algebra Honors _____

<i>Content</i>	<i>Assessment</i>	<i>Common Core</i>	<i>Essential Questions</i>
Chapter 3: Decimals and Fractions			Chapter 3
<ul style="list-style-type: none"> • Rounding and Estimating • Estimating by Multiplying and Dividing • Mean, Median, and Mode • Using Formulas • Solve Equations by Adding or Subtracting Decimals • Solve Equations by Dividing or Multiplying Decimals • Metric System 	<ul style="list-style-type: none"> • p. 132 (2-24)E (48-54)E • p. 136 (2-24)E (40-50)E • Pr 3-3 ws • Quiz 3-1--3-3 • p. 147 (2-18)E (28-32)E • p. 152 (2-16)E (39-43)A #38EC • Pr1-4 (5-18)A M2L1 • p. 156 (2-20)E (42-46)E #38 EC • p. 161 (2-20)E (62- 	<ul style="list-style-type: none"> 7 SP 3 7 SP 4 7 G 1 7 NS 1b 7 NS 1c 7 NS 1d 7 NS 2a 7 NS 2b 	<ul style="list-style-type: none"> • Round decimals? • Estimate sums and differences? • Estimate products? • Estimates quotients? • Find the mean, medium, mode, and range of a set of data? • Choose the best measure of tendency? • Substitute formulas? • Use the formula for the perimeter of a rectangle? • Solve one-step decimal equations involving addition and subtraction? • Solve one-step equations involving multiplication and division? • Identify appropriate metric measurements?

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<ul style="list-style-type: none"> • Act it out <p style="text-align: center;">Chapter 4: Factors, Fractions, and Exponents</p> <ul style="list-style-type: none"> • Divisibility and Factors • Exponents • Simplifying Fractions • Solve a Simpler Problem • Rational Numbers 	<p>66)E</p> <ul style="list-style-type: none"> • p. 168 (1-8)A (12-24)E • Review p. 171 (10-64)E • Chapter 3 Test • Pr 4-1 (1-20)A#21EC • p. 188(2-32)E • Pr 4-2 ws • p. 198 (8-20)E (28-38)E (52-56)E #58EC • Pr 4-4 • p. 203 (1-8)A (14-24)E #12EC • Pr 4-6 ws • p. 217 (2-34)E • Pr 4-8 #13EC 	<p>7 NS 2c</p> <p>7 NS 1</p> <p>7 NS 3</p> <p>7 EE 1</p> <p>7 EE 3</p> <p>7 SP 5</p> <p>7 SP6</p>	<ul style="list-style-type: none"> • Convert metric measurements? • Solve problems by acting them out? <p style="text-align: center;">Chapter 4</p> <ul style="list-style-type: none"> • Using divisibility tests? • Finding factors? • Finding equivalent fractions? • Writing fractions in simplest form? • Analyzing errors? • Solve a simpler problem? • Identifying and graphing rational numbers? • Evaluating fractions containing variables? • Multiplying powers with the same base? • Finding a power of a power? • Dividing expressions containing exponents? • Simplifying expressions with integer exponents?
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<ul style="list-style-type: none"> • Exponents and Multiplication • Exponents and Division Chapter 5: Fraction Mini Lesson Chapter 6: Ratios, Proportions, and Percents <ul style="list-style-type: none"> • Ratios and Unit Rates • Proportions • Similar Figures and Scale Drawings Fractions, Percents, and Decimals • Proportions to Percents • Percents and Equations 	<ul style="list-style-type: none"> • p. 211 (2-32)E (50-54)E • Review p. 227 (7-60)E • Chapter 4 Test • Fraction Packet • p. 294 (1-16)A #34EC • PR 6-1 • PR 6-2 • p. 300 (2-20)E (55-60)A • Pr 6-3 (1-14)A • Quiz 6-1--6-3 • p. 316 (2-30)E (46-54)E #87EC • Pr 6-7 ws #7EC •Q2 Pre-Algebra Hon. Project Due 	<p style="text-align: center;">7 NS 2d; 7 EE 3</p> <p style="text-align: center;">7 RP 1</p> <p style="text-align: center;">7 RP 2</p> <p style="text-align: center;">7 RP 2a</p> <p style="text-align: center;">7 RP 2b</p> <p style="text-align: center;">7 RP 2c</p>	<ul style="list-style-type: none"> • Writing and evaluating scientific notation? • Solving problems with fractions? <li style="text-align: center;">Chapter 6 • Writing and simplifying ratios? • Finding rates and unit rates? • Solving proportions? • Using Proportions to solve problems? • Using similar figures? • Using scale drawings? Writing percents as fractions and decimals? • Ordering rational numbers? • Finding the part of a whole and percent? • Finding the whole amount? • Writing and solving percent equations? • Using equations to solve Percent Problems?
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QUARTER: _____3rd Quarter_____

COURSE: _____Pre-Algebra Honors_____

<i>Content</i>	<i>Assessment</i>	<i>Common Core</i>	<i>Essential Questions</i>
Continue Chapter 6 <ul style="list-style-type: none"> • Probability 	<ul style="list-style-type: none"> • RT 6-4 (1-16)A • Review p. 343 (2-44)E • Chapter 6 Test 		<ul style="list-style-type: none"> • Finding probability?
Chapter 9: Spatial Thinking <ul style="list-style-type: none"> • Introduction to Geometry: Points, Lines, and Planes • Angle Relationships and Parallel Lines • Classifying Polygons • Draw a Diagram • Translations • Symmetry and Reflections • Rotations • Tessellations 	<ul style="list-style-type: none"> • Pr 9-1 • Pr 9-2 • p. 477 (1-19)A • p. 482 (1-9)A • Slide, Flip, Turn ws • Short Response • Extended Response • Sign Quiz • Comp. Lab: ISAT Practice Test 	7 SP 4 7 SP 8b 7 SP 8c 7 G 1 7 G 2 7 G 3	Chapter 9 <ul style="list-style-type: none"> • Points, Lines, and planes? • Drawing and measuring angles-lab? • Adjacent and vertical angles? • Relating Angles and parallel lines? • Classifying triangles? • Classifying quadrilaterals? • Drawing a diagram? • Identifying corresponding parts? • Identifying congruent triangles? • Graphing translations? • Describing translations? • Identifying lines of symmetry? • Graphing reflections?

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<p>Chapter 10: Area and Volume</p> <ul style="list-style-type: none"> • Area: Parallelograms • Area: Triangles and Trapezoids • Area: Circles (& Circumference) • Surface Area: Prisms and Cylinders • Volume: Prisms and Cylinders 	<ul style="list-style-type: none"> • Pr 10-1 • Pr 10-2 • Pr 10-3 • Quiz over Area • p. 554 (4-13)A • p.565 (1-6)A(10-13)A • Chapter Test 10 • Q3 Pre-Algebra Hon. Project Due 	<p>7 RP 2d</p> <p>7 SP 7</p> <p>7 SP 7a</p> <p>7 SP 7b</p> <p>7 SP 8</p> <p>7 SP 8a</p> <p>7 G1</p> <p>7 G2</p> <p>7 G3</p> <p>7 G 4</p>	<ul style="list-style-type: none"> • Graphing rotations? • Identifying rotational symmetry? • Tessellations-lab? <p style="text-align: center;">Chapter 10</p> <ul style="list-style-type: none"> • Finding areas of rectangles? • Finding areas of triangles? • Perimeter and area of similar figures-lab • Finding areas of triangles? • Finding areas of trapezoids? • Finding the areas of circles? • Finding the areas of irregular figures? • Three views of an object? • Naming space figures? • Identifying Space figures from nets? • Wrapping cylinders? • Finding the surface areas of Prisms? • Finding the surface areas of Cylinders?
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QUARTER: _____4th Quarter_____

COURSE: _____Pre-Algebra Honors_____

<i>Content</i>	<i>Assessment</i>	<i>Common Core</i>	<i>Essential Questions</i>
<p>Chapter 7: Solving Two-Step Equations and Inequalities</p> <ul style="list-style-type: none"> • Solving Two-Step Equations • Solving Multi-Step Equations • Write an Equation • Solving Equations with Variables on Both Sides • Transforming Formula • Simple & Compound Interest 	<ul style="list-style-type: none"> • p. 354 (4-22)E (41-43)A #38EC • PR 7-1 (1-18)A #19 EC • RT 7-2 (1-7)A • p. 368 (1-8)A(16-22)A • p. 373 (8-24)E(35-36)A #49 EC • p. 384 (2-12)E • Quiz 	<p>7 EE 1</p> <p>7 EE 2</p> <p>7 EE3</p> <p>7 EE 4</p> <p>7 EE 4a</p> <p>7 NS 3</p> <p>7 RP 3</p>	<p style="text-align: center;">Chapter 7</p> <ul style="list-style-type: none"> • Using properties to solve two-step equations? • Solving problems with two-step equations? • Combing like terms? • Using the distributive property? • Writing equations to solve problems? • Solving equations with variables on both sides? • Using equations with variables on both sides? • Solving formulas for a given variable? • Using formulas to solve problems? <p style="text-align: center;">Chapter 12</p> <ul style="list-style-type: none"> • Using breaks in scales? • Using different scales? • Counting possible choices?
<p>Chapter 12: Data Analysis and Probability</p> <ul style="list-style-type: none"> • Using Graphs to Persuade • Counting Outcomes and 	<ul style="list-style-type: none"> • Prob ws • Prob ws: Mult. Events • p. 651 (1-10)A(26- 		

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<p style="text-align: center;">Theoretical Probability</p> <p>Chapter 13 Nonlinear Functions and Polynomials</p> <ul style="list-style-type: none"> • Use Multiple Strategies 	<p>30)A</p> <ul style="list-style-type: none"> • p. 660 (2-14)E • PR 13-1 • p. 714 (12-26)E (42-48)E #64 EC • p. 720 (8-26)E • p. 725 (12-20)E (30-38)E • p. 729 (1-29)Odd • p. 734 (1-9)A (19-20)A • 737 (16-20)E (36-70)E • Chapter 12 & 13 Test • Q4 Pre-Algebra Hon. Project Due 	<p>7 SP 1</p>	<ul style="list-style-type: none"> • Finding the probability by counting outcomes? • Independent events? • Dependent events? <p style="text-align: center;">Chapter 13</p> <ul style="list-style-type: none"> • Combining strategies?
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