

MATH TIMETABLE 2011-2012

Algebra I

1st six-weeks
15 Teaching Days

Number of Days	Activity	Concept	TEKS
1.5	-Crossing the River (1 Day)	<ul style="list-style-type: none"> • Independent and Dependent Variables • Determine functional relationships from gathered data • Write and describe equations and inequalities • Multiple representations of relationships • Interpret functional relationships • Identify domain and range with continuous and discrete data • Interpret and create graphs • Make and interpret scatterplots (positive, negative, and no correlation) • Use symbols and variables • Look for patterns • Find specific values for problem situations • Use the commutative, associative, and distributive properties • Connect equations and functional notation • Problem Solving 	A.1 thru .A-E A.3A,B A4.A,B
2.5	-Parachute Drop (2.5 Days)	<ul style="list-style-type: none"> • Independent and Dependent Variables • Determine functional relationships from gathered data • Write and describe equations and inequalities • Multiple representations of relationships • Interpret functional relationships • Identify domain and range with continuous and discrete data • Interpret and create graphs • Make and interpret scatterplots (positive, negative, and no correlation) • Use symbols and variables • Look for patterns • Find specific values for problem situations • Use the commutative, associative, and distributive properties • Connect equations and functional notation • Problem Solving 	A.1.thru A-E A.2A-thru A.2D
7	-Valentine's Problem (7 Days)	<ul style="list-style-type: none"> • Independent and Dependent Variables • Determine functional relationships from gathered data • Write and describe equations and inequalities • Multiple representations of relationships • Interpret functional relationships • Identify domain and range with continuous 	A.1 thru A.1E A.3A,B A.4C

MATH TIMETABLE 2011-2012

Algebra I

		<ul style="list-style-type: none"> and discrete data • Interpret and create graphs • Make and interpret scatterplots (positive, negative, and no correlation) • Use symbols and variables • Look for patterns • Find specific values for problem situations • Use the commutative, associative, and distributive properties • Connect equations and functional notation • Problem Solving 	
2	Tables, Graphs, and Function Notation (1 Day)	<ul style="list-style-type: none"> • Independent and Dependent Variables • Determine functional relationships from gathered data • Write and describe equations and inequalities • Multiple representations of relationships • Interpret functional relationships • Identify domain and range with continuous and discrete data • Interpret and create graphs • Make and interpret scatterplots (positive, negative, and no correlation) • Use symbols and variables • Look for patterns • Find specific values for problem situations • Use the commutative, associative, and distributive properties • Connect equations and functional notation • Problem Solving 	<p>A.1A thru.1E</p> <p>A.3A,B</p> <p>A.4A,C</p>

MATH TIMETABLE 2011-2012

Algebra I

2nd six-weeks
15 Teaching Days

Number of Days	Activities	Concept	TEKS
5	Identifying Patterns	<ul style="list-style-type: none"> • Independent / Dependent relationship • Gather Record Data • Develop Rates of Change and Determine Slopes • Interpret the meaning of Slopes and Intercepts • Changes in m (slope) and b (y-intercept) • Graph or write equations of lines • Determine intercepts of linear functions • Effects of changing slope and y-intercept • Use concrete models, tables, graphs, diagrams and /or verbal descriptions • Problem Solving 	A.1A thru A.1E A.2B A.3A,B A.4A,C
1	Family of Functions	<ul style="list-style-type: none"> • Describe functional relationships • Write equations and Inequalities • Develop Rates of Change and Determine Slopes • Interpret the meaning of Slopes and Intercepts • Changes in m (slope) and b (y-intercept) • Graph or write equations of lines • Determine intercepts of linear functions • Effects of changing slope and y-intercept • Use concrete models, tables, graphs, verbal descriptions • Problem Solving 	A.2A,B A.5A thru A.5C
1	Bathing the Dog	<ul style="list-style-type: none"> • Develop Rates of Change and Determine Slopes • Interpret the meaning of Slopes and Intercepts • Changes in m (slope) and b (y-intercept) • Graph or write equations of lines • Determine intercepts of linear functions • Effects of changing slope and y-intercept • Represent relationships using concrete models, tables, graphs, diagrams and verbal descriptions • Problem Solving 	A.1A,E A.5A A. 6 A thru A.6C
1.5	Interpreting Distance vs. Time Graphs	<ul style="list-style-type: none"> • Equations and Inequalities • Develop Rates of Change and Determine Slopes • Interpret the meaning of Slopes and Intercepts • Changes in m (slope) and b (y-intercept) • Graph or write equations of lines • Determine intercepts of linear functions • Effects of changing slope and y-intercept • Use concrete models, tables, graphs, 	A.2C A.5A thru A.5C A. 6 A thru A.6C

MATH TIMETABLE 2011-2012

Algebra I

		<ul style="list-style-type: none"> verbal descriptions • Problem Solving 	
.5	Identifying Graphs	<ul style="list-style-type: none"> • Develop Rates of Change and Determine Slopes • Interpret the meaning of Slopes and Intercepts • Changes in m (slope) and b (y-intercept) • Graph or write equations of lines • Determine intercepts of linear functions • Effects of changing slope and y-intercept • Use concrete models, tables, graphs, verbal descriptions • Problem Solving 	A.2C A.6A,B
.5	How can You Represent a Function?	<ul style="list-style-type: none"> • Develop Rates of Change and Determine Slopes • Interpret the meaning of Slopes and Intercepts • Changes in m (slope) and b (y-intercept) • Graph or write equations of lines • Determine intercepts of linear functions • Effects of changing slope and y-intercept • Use concrete models, tables, graphs, verbal descriptions • Problem Solving 	A.1B,D,E A.2B A.5A-C A.6A,B
1	Stacking Cups	<ul style="list-style-type: none"> • Develop Rates of Change and Determine Slopes • Interpret the meaning of Slopes and Intercepts • Changes in m (slope) and b (y-intercept) • Graph or write equations of lines • Determine intercepts of linear functions • Effects of changing slope and y-intercept • Use concrete models, tables, graphs, verbal descriptions • Problem Solving 	A.1B-E A.3A,B A.4A A.7A,B A.6A,B

MATH TIMETABLE 2011-2012

Algebra I

3rd six-weeks 11 Teaching Days

Number of Days	Activities	Concept Unit 1 and 2	TEKS
1	The Slope Formula	<ul style="list-style-type: none"> • Parent Functions • Determine linear functions • Determine Domain and Range • Multiple Representations of Linear Functions • Direct Variation • Analyze and formulate linear • Problem Solving 	A.3A A.6A,B
1	Closing the Distance	<ul style="list-style-type: none"> • Parent Functions • Determine linear functions • Determine Domain and Range • Multiple Representations of Linear Functions • Direct Variation • Analyze and formulate linear • Problem Solving 	A.5C A.6A thru A.6G
.5	Transformation Guess Who	<ul style="list-style-type: none"> • Parent Functions • Determine linear functions • Determine Domain and Range • Multiple Representations of Linear Functions • Direct Variation • Analyze and formulate linear • Problem Solving 	A.1D A.2C A.3A A.5C A.6A thru A.6D
1	Review/Test over Slope and Slope Intercept	<ul style="list-style-type: none"> • Parent Functions • Determine linear functions • Determine Domain and Range • Multiple Representations of Linear Functions • Direct Variation • Analyze and formulate linear • Problem Solving 	
1	Point-Slope Formula	<ul style="list-style-type: none"> • Parent Functions • Determine linear functions • Determine Domain and Range • Multiple Representations of Linear Functions • Direct Variation • Analyze and formulate linear • Problem Solving 	A.3A A.5C A.6A thru A. 6D
1	Inequalities on a number line	<ul style="list-style-type: none"> • Analyze and formulate linear equations and inequalities • Investigate methods to solve linear equations and inequalities using multiple representations • Interpret and determine the reasonableness of solutions to linear equations and inequalities 	A.6A A.7B

MATH TIMETABLE 2011-2012

Algebra I

		<ul style="list-style-type: none"> • Problem Solving 	
2	Limiting Driving Miles (Linear Inequalities)	<ul style="list-style-type: none"> • Analyze and formulate linear equations and inequalities • Investigate methods to solve linear equations and inequalities using multiple representations • Interpret and determine the reasonableness of solutions to linear equations and inequalities • Problem Solving 	A.2A thru A.2C A.7A thru A.7C
1	3rd Six Weeks Review/Test	<ul style="list-style-type: none"> • Parent Functions • Determine linear functions • Determine Domain and Range • Multiple Representations of Linear Functions • Direct Variation • Analyze and formulate linear • Analyze and formulate linear equations and inequalities • Investigate methods to solve linear equations and inequalities using multiple representations • Interpret and determine the reasonableness of solutions to linear equations and inequalities • Problem Solving 	
2	Semester Exam Review/Exam		

MATH TIMETABLE 2011-2012

Algebra I

4th six-weeks
15 Teaching Days

Number of Days	Activity	Concept Unit 2 & 3	TEKS
1	Writing/Solve one variable equation	<ul style="list-style-type: none"> • Analyze situations and formulate systems of equations. • Writing system of linear equations • Formulate two unknowns to solve equations\ • Solve systems by graphs, tables and • Solve systems by algebraic method • Determine reasonableness of solutions to systems of linear equations • Utilize concrete models, graphs, tables, and algebraic methods 	A.8 A, B, C
1	Writing systems of equations	<ul style="list-style-type: none"> • Writing system of linear equations • Formulate two unknowns to solve equations • Solve systems by graphs, tables and • Solve systems by algebraic method • Determine reasonableness of solutions to systems of linear equations 	A.8 A, B, C
1	Solving systems by Graphing	<ul style="list-style-type: none"> • Writing system of linear equations • Formulate two unknowns to solve equations • Solve systems by graphs, tables and • Solve systems by algebraic method • Determine reasonableness of solutions to systems of linear equations 	A.8 A, B, C
2	Road Trip	<ul style="list-style-type: none"> • Writing system of linear equations • Formulate two unknowns to solve equations • Solve systems by graphs, tables and • Solve systems by algebraic method • Determine reasonableness of solutions to systems of linear equations 	A.8 A, B, C
2	Shopping Spree	<ul style="list-style-type: none"> • Writing system of linear equations • Formulate two unknowns to solve equations • Solve systems by graphs, tables and • Solve systems by algebraic method • Determine reasonableness of solutions to systems of linear equations 	A.8 A, B, C
1	Systems by all three methods (Solve It 4 Ways, and Which way Do I Go?)	<ul style="list-style-type: none"> • Writing system of linear equations • Formulate two unknowns to solve equations\ • Solve systems by graphs, tables and • Solve systems by algebraic method • Determine reasonableness of solutions to systems of linear equations 	A.8 A, B, C
1	Review Systems	<ul style="list-style-type: none"> • Writing system of linear equations • Formulate two unknowns to solve equations • Solve systems by graphs, tables and • Solve systems by algebraic method • Determine reasonableness of solutions to systems of linear equations 	A.8 A, B, C

MATH TIMETABLE 2011-2012

Algebra I

1	Systems of Equations Test	<ul style="list-style-type: none"> • Writing system of linear equations • Formulate two unknowns to solve equations\ • Solve systems by graphs, tables and • Solve systems by algebraic method • Determine reasonableness of solutions to systems of linear equations 	A.8 A, B, C
1	Basketball PowerPoint over Quadratic Equations	<ul style="list-style-type: none"> • Problem Solving • Solving quadratic equations using multiple representations and methods (concrete models, tables, graphs, and algebraic methods) • Determine domain and range for quadratic functions • Changes in 'a' for quadratic equations • Changes in 'c' for quadratic equations • Analyze graphs of quadratic functions and draw conclusions 	A.10A, B A.9A, B, C, D
.5	Quadratic Equations Flip Chart (on Wiki from Promethean Planet)	<ul style="list-style-type: none"> • Problem Solving • Solving quadratic equations using multiple representations and methods (concrete models, tables, graphs, and algebraic methods) • Determine domain and range for quadratic functions • Changes in 'a' for quadratic equations • Changes in 'c' for quadratic equations • Analyze graphs of quadratic functions and draw conclusions 	A.10A, B A.9A, B, C, D
.5	Graphing Quadratic Equations	<ul style="list-style-type: none"> • Problem Solving • Solving quadratic equations using multiple representations and methods (concrete models, tables, graphs, and algebraic methods) • Determine domain and range for quadratic functions • Changes in 'a' for quadratic equations • Changes in 'c' for quadratic equations • Analyze graphs of quadratic functions and draw conclusions 	A.10A, B A.9A, B, C, D
1	Investigating the Role of a Investigating the Role of c	<ul style="list-style-type: none"> • Problem Solving • Solving quadratic equations using multiple representations and methods (concrete models, tables, graphs, and algebraic methods) • Determine domain and range for quadratic functions • Changes in 'a' for quadratic equations • Changes in 'c' for quadratic equations • Analyze graphs of quadratic function draw conclusions 	A.10A, B A.9A, B, C, D
1	Quadratic Equation Review and Quiz (or possible Test)	<ul style="list-style-type: none"> • Problem Solving • Solving quadratic equations using multiple representations and methods (concrete models tables, graphs, and algebraic methods) • Determine domain and range for quadratic functions • Changes in 'a' for quadratic equations • Changes in 'c' for quadratic equations 	A.10A, B A.9A, B, C, D

MATH TIMETABLE 2011-2012

Algebra I

		<ul style="list-style-type: none">Analyze graphs of quadratic functions and draw conclusions	
1	Laws of Exponents Rules Add/Sub Polynomials	<ul style="list-style-type: none">Problem SolvingGenerate and apply Laws of ExponentsUse patterns to generate Laws of exponents	A.11A

MATH TIMETABLE 2011-2012

Algebra I

5th six-weeks
15 Teaching Days

Number of Days	Activities	Concept Unit 3	TEKS
3	Multiplying Polynomials/FOIL	<ul style="list-style-type: none">• Solve quadratic equations• Make connections among the solutions (roots) of quadratic equations,• The zeros of their related functions, and• The horizontal intercepts• Use concrete models (use algebra tiles), tables, graphs and algebraic methods	10 A, B
2	Review Laws of Exponents and Polynomials	<ul style="list-style-type: none">• Generate the laws of exponents and• Apply them in problem-solving situations	11A
1	Laws of Exponents and Polynomials TEST	<ul style="list-style-type: none">• Generate the laws of exponents and• Apply them in problem-solving situations	10 A, B
1	Inverse Variation Direct Variation	<ul style="list-style-type: none">• Inverse variation• Analyze data and represent situations involving inverse variation	11B
2	Growth and Decay	<ul style="list-style-type: none">• Exponential growth and decay• Analyze data and represent situations involving exponential growth and decay	11C
6	Formula Chart Book/Spiral Review of assessed objectives	Prior to EOC	ALL 9 th grade TEKS

MATH TIMETABLE 2011-2012

Algebra I

6th six-weeks
15 Teaching Days

Number of Days	Activities	Concept Unit 3	TEKS
3	To be Determined	<ul style="list-style-type: none">• Operations with Rational Numbers• Review of rules for signed numbers• Review of rounding rules• Review of operations with fractions and decimals	8.2A and 8.2B
3	To be Determined	<ul style="list-style-type: none">• Simplify Polynomial expressions• Transform and solve Equations• Factor to solve problem situations• Utilize Concrete Models, Graphs, Tables and algebraic Methods to Solve Equations	A.4A, thru A.4C
3	To be Determined	<ul style="list-style-type: none">• Determine if problem situation is Linear or Quadratic or Exponential• Determine the domain and Range for Linear Functions• Use, translate and make connections among algebraic, tabular, graphical or verbal descriptions of linear functions.	A.5 A thru A.5C
3	To be Determined	<ul style="list-style-type: none">• Develop the concept of slope as rate of change• Determine slope from graphs, tables, and algebraic representations• Investigate, describe, and predict changes in m on the graph of $y=mx + b$• Investigate, describe, and predict changes in b on the graph of $y = mx + b$.	A.6 A thru A.6D
1	Review	<ul style="list-style-type: none">• Review for Final Exam	All Algebra I TEKS
1	Final Exam	<ul style="list-style-type: none">• Comprehensive exam of all Algebra I TEKS	All Algebra I TEKS