


Algebra II Prep Westside High School
 January 3 – February 17
 Fourth Six Weeks – all dates are subject to change

Monday	Tuesday	Wednesday	Thursday	Friday
January 2 Student Holiday / Teacher Workday	3 4.5 Solve Quadratic Equations by Finding Square Roots SLG # 11, 14	4 4.5 (continued) 4.6 Perform Operations with Complex Numbers SLG # 11, 14	5 4.5 (continued) 4.6 Perform Operations with Complex Numbers SLG # 11, 14	6 4.6 Perform Operations with Complex Numbers SLG # 11, 14
9 4.7 Complete the Square SLG # 11	10 4.9 Graph and Solve Quadratic Inequalities SLG # 11, 12, 13	11 4.10 Write Quadratic Functions and Models SLG # 13, 17	12 4.10 Write Quadratic Functions and Models SLG # 13, 17	13 Review
16 MLK Holiday 	17 Test # 10 4.5 – 4.10	18 5.1 Use Properties of Exponents	19 5.1 Use Properties of Exponents	20 6.1 Evaluate nth Roots and Use Rational Exponents
23 6.2 Apply Properties of Rational Exponents	24 6.4 Inverse of Square Root SLG # 15	25 6.5 Graph Square Roots and Cube Root Functions 6.6 Solve Radical Equations SLG # 16	26 6.5 Graph Square Roots and Cube Root Functions 6.6 Solve Radical Equations SLG # 16	27 6.6 Solve Radical Equations
30 Review	31 Test # 11 5.1, 6.1, 6.2, 6.4, 6.5, 6.6	February 1 8.1 Model Inverse and Joint Variation 8.2 Graph Simple Rational Functions SLG # 18	2 8.1 Model Inverse and Joint Variation 8.2 Graph Simple Rational Functions SLG # 18, 19, 20	3 8.2 Graph Simple Rational Functions SLG # 19, 20
6 8.3 Graph General Rational Functions SLG # 19, 20	7 8.3 Graph General Rational Functions SLG # 19, 20	8 Review	9 Review	10 Test # 12 8.1 – 8.3
13 8.4 Multiply and Divide Rational Expressions SLG # 19	14 8.4 Multiply and Divide Rational Expressions 8.5 Add and Subtract Rational Expressions SLG # 19	15 8.5 Add and Subtract Rational Expressions SLG # 19	16 8.5 Add and Subtract Rational Expressions SLG # 19	17 8.6 Solve Rational Equations SLG # 19

Student Learning Targets for Algebra II

#	Student Learning Goal	Timeline
11	The student will solve quadratic equations and inequalities using graphs, tables, and algebraic methods. ALGII.8D	
12	The student will determine the reasonableness of solutions to quadratic equations and inequalities. ALGII.6A(ii)	
13	The student will relate representations of quadratic functions in algebraic, tabular, graphical, and verbal forms. ALGII.6B	
14	The student will analyze situations involving quadratic functions and formulate quadratic equations or inequalities to solve problems. ALGII.8A	
15	The student will describe and analyze the relationship between a function and its inverse using concrete representations, tables of values, graphs, and symbolic representations. ALGII.4C s	
16	The student will analyze situations modeled by square root functions, formulate equations or inequalities, select a method including tabular, graphical, or algebraic to solve problems. ALGII.9F	
17	The student will extend parent functions with parameters including a in $g(x)=a[f(x)]$, k in $g(x)=f(x) + k$ and h in $g(x)=f(x-h)$, and describe the effects of the parameter changes on the graph of parent functions. ALGII.4B	
18	The student will use functions to model and make predictions in problem situations involving direct and inverse variation. ALGII.10G s	
19	The student will analyze the solutions of rational equations using graphs, tables, and algebraic methods. ALG.10D s	
20	The student will analyze a situation modeled by a rational function, formulate an equations or inequality composed of a linear quadratic function, and solve the problem. ALGII.10F	
21	The student will develop the definition of logarithms by exploring and describing the relationship between exponential functions and their inverses using concrete functions, tables, and symbolic expressions. ALG.II11A	
22	The student will interpret and determine the reasonableness of solutions to exponential and logarithmic equations and inequalities. ALGII.11C(2)	
23	The student will determine solutions of exponential and logarithmic equations and inequalities using the GRAPH, TRACE, and TABLE features on a graphing calculator as well as algebraic methods. ALGII.11E and ALGII.11D s	
24	The student will analyze a situation modeled by an exponential function, formulate an equation or inequality, solve the problem, and relate the solution to the domain and range that have meaning in the context of the situation. ALGII.F	

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25	The student will determine the reasonable domain and range values of exponential and logarithmic functions including subsets of the domain and range which have meaning in a given situation. ALGII.11C(1) s	
26	The student will sketch graphs of conic sections to relate simple parameter changes in the equations of circles, $(x-h)^2 + (y-k)^2 = r^2$, parabolas, $y=(x-h)^2 + k$ or $x=(y-k)^2 + h$, ellipses, $(x-h)^2/a^2 + (y-k)^2/b^2 = 1$ and hyperbolas, $(x-h)^2/a^2 - (y-k)^2/b^2 = 1$ or $(x-h)^2/b^2 - (y-k)^2/a^2 = 1$. ALGII.5B s	
27	The students will review relevant TAKS objectives (based on individual student needs determined by data analysis) prior to testing using appropriate problem-solving strategies and skills. TAKS Review.	
28	The student will identify symmetries from graphs of conic sections. ALGII.5C s	
29	The student will identify a conic section from the general equation $Ax^2+Bxy+Cy^2+Dx+EY+F=0$ and make generalizations from patterns in both equation and graphical form. ALGII.5D s	
30	The student will use the method of completing the square to solve quadratic equations and to transform general forms of conic sections in order to graph. ALGII.5E s	
31	The student will apply algebraic methods including substitution or linear combination, graphs, tables, or matrices, to solve systems of equations, or inequalities. ALGII.3B	
32	The student will analyze situations and formulate systems of equations in two or more unknowns or inequalities in two unknowns to solve problems. ALGII.3A	