

Algebra 2 McGraw Hill - Pacing Guide

SEMESTER 1		
Dates		Number of Days
August 17 - 19	Beginning of the Year ALEKS Window	3 days
August 20 - September 11 16 days	Unit 10 – Inferential Statistics	
	Big Idea: Inferences and Conclusions from Data; Probability Modeling	
	Essential Question: How can data be collected and interpreted so that it is useful to a specific audience?	
	10-1 Random Sampling and Studies	2 days
	10-2 Using Statistics to Make Decisions	2 days
	10-3 Analyzing Population Data	2 days
	10-4 Probability Distributions	2 days
	10-5 Normal Distributions	3 days
	10-6 Estimating Population Parameters	2 days
	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>	3 days
September 14 - October 2 15 days	Unit 3 – Quadratic Functions	
	Big Idea: Investigate and Model with Functions; Equations and Algebra	
	Essential Question: What are the limitations of the different methods for solving quadratic equations?	
	3-1 Graphing and Interpreting Quadratic Functions	2 days
	3-2 Solving Quadratic Equations by Graphing	2 days
	3-3 Complex Numbers	3 days
	3-4 Solving Quadratic Equations by Factoring	2 days
	3-6 Using the Quadratic Formula and the Discriminant	2 days
	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>	4 days
October 5 - October 7	Benchmark Assessment # 1: Unit 3 Assessment - Form A	October 5 - October 7
October 8 - October 23 11 days	Unit 4 – Polynomials and Polynomial Functions	
	Big Ideas: Equations and Algebra; Investigate and Model with Functions	
	Essential Question: How does an understanding of polynomials and polynomial functions help us understand and interpret real-world events?	
	4-1 Operations with Polynomials	3 days
	4-4 Polynomial Functions	3 days
	4-5 Analyzing Graphs of Polynomial Functions	2 days
	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>	2 days
	Unit Assessment/Performance Task/IAB/fIAB	1 day
	Unit 5 – Polynomial Equations	
	Big Ideas: Equations and Algebra	
	Essential Question: What methods are useful for solving polynomial equations and finding zeros of polynomial functions?	
	5-2 Solving Polynomial Equations Algebraically	3 days

October 26- November 13 14 days	5-3	Proving Polynomial Identities	2 days
	5-4	The Remainder and Factor Theorems	2 days
	5-5	Roots and Zeros	2 days
	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>		4 days
	Unit Assessment/Performance Task/IAB/fIAB		1 day
November 16 - December 14 16 days	Unit 6 – Inverses and Radical Functions		
	Big Ideas: Growth and Decay; Investigate and Model with Functions; Equations and Algebra		
	Essential Question: How can inverse operations and the inverse of a function be used to help interpret a real-world event or solve a problem?		
	6-1	nth Root and Rational Exponents	2 days
	6-2	Operations with Radical Expressions	2 days
	6-3	Graphing Radical Functions	2 days
	6-4	Solving Radical Equations and Inequalities	3 days
	6-5	Operations on Functions	2 days
	6-6	Inverse Relations and Functions	2 days
	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>		3 days
December 15 - 17	Benchmark Assessment # 2 (Final Exam): Unit 6 Assessment - Form A		December 15 - 17

SEMESTER 2			
Dates			Number of Days
January 14 - January 15 2 days	Unit 7 - Exponential Functions		
	Big Ideas: Investigate and Model with Functions; Equations and Algebra; Growth and Decay		
	Essential Question: How are real-world situations involving quantities that grow and decline rapidly modeled mathematically?		
	7-1	Graphing Exponential Functions	2 days
January 19 - January 22	Middle of the Year ALEKS Window		January 19 - 22
January 25 - February 5 10 days	7-2	Solving Exponential Equations and Inequalities	2 days
	7-3	Special Exponential Functions	2 days
	7-4	Geometric Sequences and Series	3 days
	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>		2 days
	Unit Assessment/Performance Task/IAB/fIAB		1 day
February 8 - March 5 18 days	Unit 8 – Logarithmic Functions		
	Big Idea: Investigate and Model with Functions; Growth and Decay; Equations and Algebra		
	Essential Question: How are logarithms defined and used to model situations in the real-world?		
	8-1	Logarithms and Logarithmic Functions	3 days
	8-2	Properties of Logarithms	3 days
	8-3	Common Logarithms	3 days
	8-4	Natural Logarithms	3 days
8-5	Using Exponential and Logarithmic Functions	3 days	

	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>	3 days
March 8 - 10	Benchmark Assessment # 3: Unit 8 Assessment - Form A	March 8 - 10
March 11 - April 12 15 days	Unit 9 – Rational Functions	
	Big Idea: Growth and Decay; Investigate and Model with Functions; Equations and Algebra	
	Essential Question: How are the rules for operations with rational numbers applied to operations with rational expressions and equations?	
	9-1 Multiplying and Dividing Rational Expressions	3 days
	9-2 Adding and Subtracting Rational Expressions	2 days
	9-3 Graphing Reciprocal Functions	2 days
	9-4 Graphing Rational Functions	2 days
	9-5 Solving Rational Equations and Inequalities	3 days
	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>	2 days
	Unit Assessment/Performance Task/IAB/fIAB	1 day
Spring Break March 24 - April 2		
April 13 - May 5 17 days	Unit 11 - Trigonometric Functions & Unit 12 - Trigonometric Identities	
	Big Ideas: Trigonometric Functions	
	Essential Questions: What are the key features of the graph of a trigonometric function and how do they represent real-world situations? How are trigonometric identities similar to and different	
	11-1 Angles and Angle Measure	3 days
	11-2 Trigonometric Functions of General Angles (only sin, cos, tan)	2 days
	11-3 Circular and Periodic Functions	2 days
	11-4 Graphing Sine and Cosine Functions	2 days
	11-6 Translations of Trigonometric Graphs (only sin and cos)	2 days
	12-1 Trigonometric Identities	3 days
	Additional/Extra Instructional Days - Unit Review/ <u>Assessment</u>	2 days
	Unit Assessment/Performance Task/IAB/fIAB	1 day
May 3 - May 21	CAASPP Testing	May 3 - May 21
June 4 - June 8	Final Exam	June 4 - June 8

Extra Instructional Days

Closing the Unit	Unit Review, Math Modeling, Unit Assessment, Performance Task, FIABs
Intervention	Fluency Practice, Differentiation (small group lessons, ALEKS, personalized practice)