Algebra 2 Semester 2 - Pacing Guide

Unit 1: Rational Expressions and Functions

COMPLETE BY: _____
before Appointment #1

Lesson 1.1 Proportions
- ☐ 1.1.1: Study
- ☐ 1.1.2: Checkup Practice Problems
- ☐ 1.1.3: Quiz

Lesson 1.2 Rational Expressions
- ☐ 1.2.1: Study
- ☐ 1.2.2: Checkup Practice Problems
- ☐ 1.2.3: Quiz

Lesson 1.3 Simplifying Rational Expressions
- ☐ 1.3.1: Study
- ☐ 1.3.2: Checkup Practice Problems
- ☐ 1.3.3: Quiz

Lesson 1.4 Multiplying and Dividing Rational Expressions
- ☐ 1.4.1: Study
- ☐ 1.4.2: Checkup Practice Problems
- ☐ 1.4.3: Quiz
- ☐ 1.4.4: Quiz

Lesson 1.5 Adding and Subtracting Rational Expressions
- ☐ 1.5.1: Study
- ☐ 1.5.2: Checkup Practice Problems
- ☐ 1.5.3: Quiz

COMPLETE BY: _____
before Appointment #2

Lesson 1.6 Inverse Variation
- ☐ 1.6.1: Study
- ☐ 1.6.2: Checkup Practice Problems
- ☐ 1.6.3: Quiz
- ☐ **1.6.4: Practice Finding the Constant in Inverse Variation**

Lesson 1.7 Solving Rational Functions
- ☐ 1.7.1: Study
- ☐ 1.7.2: Checkup Practice Problems
- ☐ 1.7.3: Quiz

Lesson 1.8 Vertical Asymptotes
- ☐ 1.8.1: Study
- ☐ 1.8.2: Checkup Practice Problems
- ☐ 1.8.3: Quiz
- ☐ 1.8.4: Quiz
- ☐ **1.8.5 Journal Rural Wireless Internet**

Lesson 1.9 Graphing Rational Functions
- ☐ 1.9.1: Study
- ☐ 1.9.2: Checkup Practice Problems
- ☐ 1.9.3: Quiz

Lesson 1.10 Rational Expressions and Functions Wrap Up
- ☐ 1.10.1: Study
- ☐ 1.10.2 Checkup Practice Problems
- ☐ **1.10.3 CST**

TEST: Take CST at appointment #2

Key Assignments	
1.6.4 Practice: Inverse Variation	
1.8.5 Journal: Rural Wireless Internet	

Unit 1 Grade:	
Unit 1 CST: Due at appointment #2	50 points
Unit 1 Quizzes (11): Completed throughout the unit	220 points
1.6.4 Practice Assignment: Due at appointment #2	20 points
1.8.5 Journal Assignment: Due at appointment #2	20 points
TOTAL	310 points

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Unit 2: Radical Expressions and Functions

COMPLETE BY: _____
before Appointment #3

Lesson 2.1 Basics of Radicals
- ☐ 2.1.1: Study
- ☐ 2.1.2: Checkup Practice Problems
- ☐ 2.1.3: Quiz
- ☐ 2.1.4: Quiz

Lesson 2.2 Multiplying and Dividing Radicals
- ☐ 2.2.1: Study
- ☐ 2.2.2: Checkup Practice Problems
- ☐ 2.2.3: Quiz
- ☐ 2.2.4: Quiz

Lesson 2.3 Adding and Subtracting Radicals
- ☐ 2.3.1: Study
- ☐ 2.3.2: Checkup Practice Problems
- ☐ 2.3.3: Quiz

Lesson 2.4 Rationalizing Denominators
- ☐ 2.4.1: Study
- ☐ 2.4.2: Checkup Practice Problems
- ☐ 2.4.3: Quiz
- ☐ **2.4.4: Journal Rationalizing Denominators**

Lesson 2.5 Solving Radical Functions
- ☐ 2.5.1: Study
- ☐ 2.5.2: Checkup Practice Problems
- ☐ 2.5.3: Quiz

COMPLETE BY: _____
before Appointment #4

Lesson 2.6 Application of Radical Equations
- ☐ 2.6.1: Study
- ☐ 2.6.2: Checkup Practice Problems
- ☐ 2.6.3: Quiz
- ☐ **2.6.4: Practice Pendulums and Bridges**

Lesson 2.7 Rational Exponents
- ☐ 2.7.1: Study
- ☐ 2.7.2: Checkup Practice Problems
- ☐ 2.7.3: Quiz
- ☐ 2.7.4: Quiz

Lesson 2.8 Review of Complex Numbers
- ☐ 2.8.1: Study
- ☐ 2.8.2: Checkup Practice Problems
- ☐ 2.8.3: Quiz
- ☐ 2.8.4: Quiz

Lesson 2.9 Performance Task: Skid Distance Problem
- ☐ 2.9.1: Study
- ☐ **2.9.2: Project Solving the Skid Distance Problem**

Lesson 2.10 Radical Expressions and Functions Wrap Up
- ☐ 2.10.1: Checkup Practice Problems
- ☐ 2.10.2: Review
- ☐ **2.10.3 CST**

TEST: Take CST at appointment #4

Key Assignments	
2.4.4: Journal: Rationalizing Denominators	
2.6.4: Practice: Pendulums and Bridges	
2.9.2: Project: Skid Distance Problem	

Unit 2 Grade:	
Unit 2 CST: Due at appointment #4	50 points
Unit 2 Quizzes (12): Completed throughout the unit	240 points
2.4.4: Practice Assignment: Due at appointment #4	20 points
2.6.4: Journal Assignment: Due at appointment #4	20 points
2.9.2: Project: Skid Distance Problem	120 points
TOTAL	450 points

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Unit 4: Statistical Analysis

COMPLETE BY: _____ before Appointment #7
Lesson 4.1 Review of Graphical Analysis of Data
☐ 4.1.1: Study
☐ 4.1.2: Checkup Practice Problems
☐ 4.1.3: Quiz
☐ 4.1.4: Quiz
Lesson 4.2 Review of Numerical Analysis of Data
☐ 4.2.1: Study
☐ 4.2.2: Checkup Practice Problems
☐ 4.2.3: Quiz
☐ 4.2.4: Quiz
☐ 4.2.5: Quiz
Lesson 4.3 Data Gathering and Inferential Statistics
☐ 4.3.1: Study
☐ 4.3.2: Checkup Practice Problems
☐ 4.3.3: Quiz
Lesson 4.4 Random Variables
☐ 4.4.1: Study
☐ 4.4.2: Checkup Practice Problems
☐ 4.4.3: Quiz
☐ 4.4.4: Quiz
☐ **4.4.5: Journal Cell Phone Battery Life**

COMPLETE BY: _____ before Appointment #8
Lesson 4.5 Experimental Design
☐ 4.5.1: Study
☐ 4.5.2: Checkup Practice Problems
☐ 4.5.3: Quiz
☐ 4.5.4: Quiz
Lesson 4.6 Solving Exponential Equations
☐ 4.6.1: Study
☐ 4.6.2: Checkup Practice Problems
☐ 4.6.3: Quiz
Lesson 4.7 Applications of Statistical Techniques
☐ 4.7.1: Study
☐ 4.7.2: Checkup Practice Problems
☐ 4.7.3: Quiz
☐ **4.7.4: Practice Statistical Truth or Fiction?**
Lesson 4.8 Statistical Analysis Wrap Up
☐ 4.8.1: Checkup Practice Problems
☐ 4.8.2: Review
☐ 4.8.3: CST
TEST: Take CST at appointment #8

Key Assignments	
3.1.4 Practice: Viral Videos	
3.4.4 Journal: Exponential Versus Quadratic	

Unit 4 Grade:	
Unit 4 CST: Due at appointment #8	50 points
Unit 4 Quizzes (13): Completed throughout the unit	260 points
4.4.5 Journal Assignment: Due at appointment #8	20 points
4.7.4 Practice Assignment: Due at appointment #8	20 points
TOTAL	350 points

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Unit 3: Exponential and Logarithmic Functions

COMPLETE BY: _____ before Appointment #5
Lesson 3.1 Geometric Sequences
☐ 3.1.1: Study
☐ 3.1.2: Checkup Practice Problems
☐ 3.1.3: Quiz
☐ **3.1.4: Practice Viral Videos**
Lesson 3.2 Exponential Functions
☐ 3.2.1: Study
☐ 3.2.2: Checkup Practice Problems
☐ 3.2.3: Quiz
☐ 3.2.4: Quiz
Lesson 3.3 Examples and Applications of Exponential Functions
☐ 3.3.1: Study
☐ 3.3.2: Checkup Practice Problems
Lesson 3.4 Graphs of Exponential Functions
☐ 3.4.1: Study
☐ 3.4.2: Checkup Practice Problems
☐ 3.4.3: Quiz
☐ **3.4.4: Journal Exponential V. Quadratic**
Lesson 3.5 Logarithmic Functions
☐ 3.5.1: Study
☐ 3.5.2: Checkup Practice Problems
☐ 3.5.3: Quiz
Lesson 3.6 Graphs of Logarithmic Functions
☐ 3.6.1: Study
☐ 3.6.2 Checkup Practice Problems
☐ 3.6.3 Quiz

COMPLETE BY: _____ before Appointment #6
Lesson 3.7 Properties of Exponents and Log.
☐ 3.7.1: Study
☐ 3.7.2: Checkup Practice Problems
☐ 3.7.3: Quiz
☐ 3.7.4: Quiz
☐ 3.7.5: Quiz
Lesson 3.8 Solving Exponential Equations
☐ 3.8.1: Study
☐ 3.8.2: Checkup Practice Problems
☐ 3.8.3: Quiz
Lesson 3.9 Solving Logarithmic Functions
☐ 3.91: Study
☐ 3.9.2: Checkup Practice Problems
☐ 3.9.3: Quiz
Lesson 3.10 Applications of Logarithms
☐ 3.10.1: Study
☐ 3.10.2: Checkup Practice Problems
Lesson 3.11 Comparing and Analyzing Function Types
☐ 3.11.1: Study
☐ 3.11.2: Checkup Practice Problems
☐ 3.11.3: Quiz
Lesson 3.12
☐ 3.12.1: Checkup Practice Problems
☐ 3.12.2: Review
☐ **3.12.3: CST**
TEST: Take CST at appointment #6

Key Assignments	
3.1.4 Practice: Viral Videos	
3.4.4 Journal: Exponential Versus Quadratic	

Unit 3 Grade:	
Unit 3 CST: Due at appointment #6	50 points
Unit 3 Quizzes (13): Completed throughout the unit	260 points
3.1.4 Practice Assignment: Due at appointment #6	20 points
3.4.4: Journal Assignment: Due at appointment #6	20 points
TOTAL	350 points

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Unit 5 and 6: Trigonometry

COMPLETE BY: _____ before Appointment #9
Lesson 5.1 Right Triangles
☐ 5.1.1: Study
☐ 5.1.2: Checkup Practice Problems
☐ 5.1.3: Quiz
Lesson 5.2 Angles and Radians
☐ 5.2.1: Study
☐ 5.2.2: Checkup Practice Problems
☐ 5.2.3: Quiz
Lesson 5.3 Trigonometric Ratios and Unit Circle
☐ 5.3.1: Study
☐ 5.3.2: Study
☐ 5.3.3: Checkup Practice Problems
☐ 5.3.4: Quiz
☐ **5.3.5: Journal A Better Way?**
Lesson 5.4 Graphs of Sine and Cosine
☐ 5.4.1: Study
☐ 5.4.2: Checkup Practice Problems
☐ 5.4.3: Quiz
Lesson 5.5 Graphs of Other Functions
☐ 5.5.1: Study
☐ 5.5.2: Checkup Practice Problems
☐ 5.5.3: Quiz
COMPLETE BY: _____ before Appointment #10

Lesson 5.6 Simple Transformations of Sinusoids
☐ 5.6.1: Study
☐ 5.6.2: Checkup Practice Problems
☐ 5.6.3: Quiz
Lesson 5.7 General Transformations of Sinusoids
☐ 5.7.1: Study
☐ 5.7.2: Checkup Practice Problems
☐ 5.7.3: Quiz
☐ **5.7.4: Practice Riding the Circular Wave**
Lesson 5.8 Identities and Proof
☐ 5.8.1: Study
☐ 5.8.2: Checkup Practice Problems
☐ 5.8.3: Quiz
Lesson 5.9 Trigonometric Identities
☐ 5.9.1: Study
☐ 5.9.2: Checkup Practice Problems
☐ 5.9.3: Quiz
Lesson 5.10 Trigonometry Wrap-Up
☐ 5.10.1: Checkup Practice Problems
☐ 5.10.2 Review
☐ **5.10.3 CST**
Unit 6: 6.1.2 Final Exam
TEST: Take CST at appointment #10 **Final Exam: Take Final Exam at appointment #10**

Key Assignments	
5.3.5 Journal: A Better Way?	
5.7.4 Practice: Riding the Circular Wave	

Unit 5 Grade:	
Unit 5 CST: Due at appointment #10	50 points
Unit 5 Quizzes (9): Completed throughout the unit	180 points
5.3.5 Journal Assignment: Due at appointment #10	20 points
5.7.4 Practice Assignment: Due at appointment #10	20 points
6.1.2 Final Exam	200 points
TOTAL	470 points