

Precalculus Learning Log Chapter 3

Name _____

WDYLT? Part of each assignment in Precalculus is your response to these 3 questions:

1. **What did you learn today that was new?**
2. **How does what you learned relate to what you previously knew?**
3. **What good is this new idea?**

You may answer these questions at any time during your assignment, but your responses should always appear as questions 1, 2, and 3 at the beginning of each assignment.

X		<u>Big Idea:</u> Exponential and Logarithmic Functions	<u>Enduring Understanding:</u> Exponential and logarithmic functions are inverses of each other and we use this property to solve equations involving these functions.	<u>Enduring Question</u> What is e ? What is a log? How long will it take to earn a million dollars in interest?	
Day	Title	Concept	LEARNING TARGETS (What I should understand, know, and be able to do.)	How am I doing? 3 = I got it right! 2 = I knew how but I made a small mistake. 1 = I tried but I didn't know what to do. 0 = I had no clue/I didn't try.	Assessments/Learning Activities
1	3.1	Exponential Functions	a) I can graph exponential functions with tables and transformations.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 3.1: 3, 8, 11, 15, 16, 17, 18, 22, 24, 30, 36, 46, 56, 66, 68 <input type="checkbox"/> 2.7: 14, 23, 43, 48, 58, 67 <input type="checkbox"/> 2.6: 15ab (also find holes), 20ab (also find holes), 38 <input type="checkbox"/> P. 169: 3, 25c, 30b, 36, 54d, 72
			b) I can recognize the limit definition		
			c) I can use exponential functions to model authentic situations such as compound interest, population growth, and radioactive decay.		
2	3.2	Logarithmic Functions	a) I understand that exponential and logarithmic functions are inverses.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 3.2: 3, 6, 12, 16, 18, 21, 26, 27, 32, 36, 39, 42, 45, 46, 47, 48, 51, 62, 64, 66, 69b <input type="checkbox"/> 3.1: 10, 12, 19, 35, 58, 69 <input type="checkbox"/> 2.7: 18, 49, 69 <input type="checkbox"/> P. 169: 14d, 24c, 55, 74, 79, 89
			b) I can convert between exponential and logarithmic form		
			c) I recognize that the number e is an important base in both exponential and logarithmic functions.		
			d) I can graph logarithmic functions		
Quiz 3A		Score: ____ Possible: ____	What do I need help with?	What's my plan?	What did I do?

3	3.3	Properties of Logarithmic Functions	a) I am able to use properties of logarithms to simplify and evaluate expressions.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 3.3: 3a, 6b, 12, 16, 18, 20, 24, 27, 30, 36, 42, 48, 54, 57, 62, 81 <input type="checkbox"/> 3.2: 2, 14, 25, 38, 40, 61, 73b <input type="checkbox"/> 3.1: 13, 24, 67 <input type="checkbox"/> P. 170: 46, 73, 80, 90, 94, 101
4	3.4	Solving Log and Exp. Equations	a) I am able to use properties of logarithms to solve logarithmic equations.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 3.4: 4, 12, 16, 18, 22, 27, 36, 48, 50, 55, 65, 78, 90, 96, 108 <input type="checkbox"/> 3.3: 41, 8b, 32, 38, 39, 53, 60, 72 <input type="checkbox"/> 3.2: 5, 15, 44 <input type="checkbox"/> P. 170: 39, 78, 98a, 103 <input type="checkbox"/>
			a) I recognize that the number e is an important base in both exponential and logarithmic functions.		
Quiz 3B		Score: ____ Possible: ____	What do I need help with?	What's my plan?	What did I do?
5	3.5/3.6	Modeling with Log and Exp. Functions	a) I am able to use exponential and logarithmic functions to model authentic situations.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 3.5: 2, 4, 6, 12, 14, 22, 24, 26, 28, 29, 37, 41a, 42b <input type="checkbox"/> 3.6: 2, 4, 6, 8, 28 <input type="checkbox"/> 3.4: 15, 49, 56, 77, 88, 101 <input type="checkbox"/> 3.3: 40, 56, 73 <input type="checkbox"/> P. 171: 100a, 114 <input type="checkbox"/> P. 245: 21, 51, 6
Quiz 3C		Score: ____ Possible: ____	What do I need help with?	What's my plan?	What did I do?
6	Review				<input type="checkbox"/> Page 239: 3, 7, 11, 14, 27, 29, 32, 33, 37, 43, 45, 57, 67, 73, 75, 79, 81, 83, 85, 87, 89, 93, 97, 101, 103, 109, 117, 121, 125, 131
Test 3		Score: ____ Possible: ____	What do I need help with?	What's my plan?	What did I do?