## MCR 3UI

## **Unit 4: Exponential Functions**

Day	Text Ref.	Topics	Homework	Done 🗸
1	1.1 pg. 4	• Reviewing the Exponent Laws (There are 7 lawscan you remember them?)	Pg. 9 #2-9 (every other one for each questions) #11, 12a	
2	1.2 pg. 11	Rational Exponents	Pg. 16 #1-5 (every other one for each questions), 6agm #10, 11a U4D2 Worksheet Extra Practice	
3	1.3 pg. 19	Solving Exponential Equations	Pg. 23 #1-6 (every other one for each questions), 9abe, 10abf	
4		QUIZ: (1.1, 1.2, 1.3) • Exploring Properties of Exponential Functions – Investigation – Comparing $y = 2^x$ , $y = 3^x$ , $y = 0.5^x$ with $y = x$ and $y = x^2$	Booklet day 1 #1-4, <b>5,6</b>	
5		<ul> <li>Summarize Key Concepts from Investigation</li> <li>Writing Exponential Functions with Different Bases</li> <li>Given a Graph or Properties, Determine the Equation of an Exponential Function.</li> </ul>	Booklet day 2 #1-7, <b>8,9</b>	
6		Transformations of Exponential Functions (Translations and Reflections)	Booklet day 3 # 1-3	
7		• Transformations of Exponential Functions (stretches, compressions, combinations)	Booklet day 4 # 1-6	
8	1.3 pg. 19	<ul> <li>More Solving Exponential Equations</li> <li>Half-Life &amp; Applications</li> </ul>	Booklet – Growth Worksheet # 1 – 4; Decay Worksheet # 1 - 4 Pg. 24 #13, 14, 16, 19, 20a	
9		Review	Pg. 85 -86 # 1-8, 9abcf, 10abdf, 12 Pg. 90-91 #1-3, 5, 6abc, 12 Booklet - day 7 #1-5 Booklet - Growth Worksheet (#5 – 8) Decay Worksheet (#5 – 7)	
10		TEST		

## Learning Goals: This unit we will...

- ☐ Simplify expressions containing integer and rational exponents
- ☐ Evaluate expressions containing integer and rational exponents
- ☐ Solve exponential equations by trial and error
- ☐ Write equations of exponential functions
- ☐ Graph transformations of exponential functions
- ☐ Apply exponential functions to real-life situations

## **PLEASE NOTE!**

If you are absent for the quiz you must write it at lunch, the first day back at school whether or not you have a Math class that day. Otherwise a mark of "0" will be assigned. Please talk to your Math teacher if you have any concerns.