

Unit 3 Exponentials and Logs

Date	Lesson/Topics	Khan Academy Videos/Exercise Sets	Done?	
Mon 4/13	Live Session: <ul style="list-style-type: none"> • Remote Learning Details (Khan Academy, Delta Math, Office Houses, Teaching) • Due Dates for Assignments • Netiquette • Review for Unit 3 Test 			
	Lesson 1: Intro to Logs	Video	Intro to Logarithms (7min)	
		Article	Intro to Logarithms	
		Exercise	Evaluate Logarithms (4 problems)	
		Video	Evaluating Logarithms Advanced (4 min)	
		Exercise	Evaluate Logarithms Advanced (4 problems)	
		Video	Relationship between exponentials and logs (1min)	
		Video	Relationship between exponentials and logs: graphs (4min)	
		Video	Relationship between exponentials and logs: tables (5min)	
		Exercise	Relationship between exponentials and logs (4 problems)	
	Lesson 2: The constant e and the natural log	Video	e and compound interest (11min)	
		Video	e as a limit (5min)	
		Video	Evaluating natural log with calculator (3min)	
	Lesson 3: Properties of Logs	Video	Intro to log properties (9min)	
		Video	Intro to log properties (10min)	
		Article	Intro to log properties	
		Video	Using the log product rule (5min)	
		Video	Using the log power rule (4min)	
		Exercise	Use the properties of logs (4 problems)	
		Video	Using the properties of logs: multiple steps (2min)	
		Video	Proof of the log product rule (7min)	
Video		Proof of the log quotient and power rule (7min)		
Article		Justifying the log properties		
Quiz	Logs Quiz 1 (5 problems)			
Wed 4/15	Live Session: <ul style="list-style-type: none"> • Answer questions for Lessons 1, 2 and 3 			
	Lesson 4: The change of base formula for logs	Video	Evaluating logs: change of base rule (7min)	
		Article	Log change of base rule intro	
		Exercises	Evaluate logs: change of base rule (4 problems)	
		Video	Using the log change of base rule (6min)	
		Exercise	Use the log change of base rule (4problems)	
		Video	Proof of the log change of base rule (4min)	
		Article	Log properties review	

	Lesson 5: Solving Exponential equations with logs	Video	Solving exponential equations using logs: base 10 (2min)	
		Article	Solving exponential equations using logs	
		Exercise	Solve exponential equations using logs: base 10 and base e (4 problems)	
		Video	Solving exponential equations using logs: base 2 (5min)	
		Exercise	Solve exponential equations using logs: base 2 and other bases (4 problems)	
	Lesson 6: Solving Exponential Models	Video	Exponential model word problem: medication dissolve (4min)	
		Video	Exponential model word problem: bacteria growth (1min)	
		Exercise	Exponential model word problems (4 problems)	
		Quiz	Logs Quiz 2 (5 problems)	
Friday 4/17	Unit 3 Test	Test	Unit 3 Test (9 problems)	