

WDYLT Part of each assignment in Calculus 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 a, b, and c at the beginning of each assignment. Your responses will count as 1/5 of your score for each assignment.

CH. 4		Big Idea: Applications of Differentiation	Enduring Understanding: Derivatives describe rates of change. Many things in our world are changing, so derivatives can help describe this change.		Enduring Question: What are derivatives good for?
Day	Title	Concept	LEARNING TARGETS (What I should understand, know, and be able to do.)	How am I doing? A= I knew how and got it right B= I knew how, but small error C= I had no idea/guessed right D= I had no idea/guessed wrong	Assessments/Learning Activities
29	4.1	Using Calculus to Find Extreme Values of Functions	a. I know what relative and absolute extrema are.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 4.1: 1, 2, 4, 7, 9, 11, 13, 17, 27, 28, 35, 40 <input type="checkbox"/> Review 3: 19, 24, 30 <input type="checkbox"/> 3.9: 26 <input type="checkbox"/> 3.3: 4 <input type="checkbox"/> 3.5: 42 <input type="checkbox"/> Review 3: 73
			b. I know that any continuous and differentiable function on a closed interval must have both an absolute maximum and an absolute minimum (Extreme Value Theorem).		
			c. I know that extreme values must occur either at critical points or endpoints.		
			d. I can find extreme values of functions.		
30	4.2	Mean Value Theorem, Determining When $f(x)$ Is Increasing or Decreasing, and Antiderivatives	a. I understand the mean value theorem geometrically and analytically.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 4.2: 1, 6, 9, 12, 30, 25, 31, 48 <input type="checkbox"/> 4.1: 10, 14, 41 <input type="checkbox"/> Review 3: 67 <input type="checkbox"/> 2.2: 62 <input type="checkbox"/> Review 3: 63 <input type="checkbox"/> 3.8: 26 <input type="checkbox"/> 3.9: 31
			b. I understand that if two function's derivatives are the same, then the functions can differ only by a constant.		
			c. I can determine when functions are increasing or decreasing.		
Quiz 11		Score: ____ Possible: ____	What do I need help with?	What's my plan?	What did I do to improve?
31	4.3	Using Calculus to Analyze Functions	a. I can determine when functions are increasing or decreasing.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 4.3: 3, 5, 7, 10, 17, 22, 23, 29, 35 <input type="checkbox"/> 4.2: 4, 10, 36, 49 <input type="checkbox"/> 4.1: 26 <input type="checkbox"/> 3.2: 20
			b. I can determine when functions are concave up and concave down and find points of inflection.		

32	4.4, Part 1	Optimization	a. I can solve optimization situations.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 4.4: 1, 2, 6, 10, 14 <input type="checkbox"/> 4.3: 2, 8, 16, 36 <input type="checkbox"/> 4.2: 40 <input type="checkbox"/> 3.4: 10 <input type="checkbox"/> 4.1: 8
Quiz 12		Score: ____ Possible: ____	What do I need help with?	What's my plan?	What did I do to improve?
33	4.4, Part 2	Optimization			<input type="checkbox"/> WDYLT? <input type="checkbox"/> 4.4: 7, 12, 15, 16, 17, 24 <input type="checkbox"/> 4.3: 28, 48 <input type="checkbox"/> 3.4: 47 <input type="checkbox"/> 3.6: 28
34	4.5	Linearization	a. I know that tangent lines can be used to approximate functions (linearization) and changes in functions (differentials).		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 4.5: 1, 3, 8, 19, 21, 25, 31 <input type="checkbox"/> 4.4: 2, 22, 31, 38 <input type="checkbox"/> 3.4: 42 <input type="checkbox"/> 3.7: 12 <input type="checkbox"/> Review 3: 8 <input type="checkbox"/> 4.1: 38
			b. I can approximate functions and changes in functions using linearization and differentials.		
Quiz 13		Score: ____ Possible: ____	What do I need help with?	How will I improve?	What did I do to improve?
35	4.6	Related Rates	a. I can solve related rates situations.		<input type="checkbox"/> WDYLT? <input type="checkbox"/> 4.6: 1, 3, 8, 11, 19 <input type="checkbox"/> 4.5: 2, 22, 38 <input type="checkbox"/> 4.4: 41 <input type="checkbox"/> 3.6: 11 <input type="checkbox"/> 4.3: 18
			b. I see that derivatives are powerful tools in analyzing functions and solving real problems that involve optimization and rates of change.		
Quiz 14		Score: ____ Possible: ____	What do I need help with?	How will I improve?	What did I do to improve?
36	Review 4		What do I need help with?		<input type="checkbox"/> Review 4: 1, 3, 5, 17, 32, 36, 37 <input type="checkbox"/> 4.6: 4, 11, 16 <input type="checkbox"/> 4.5: 50 <input type="checkbox"/> 2.3: 8 <input type="checkbox"/> 3.5: 8 <input type="checkbox"/> 4.2: 7 <input type="checkbox"/> 4.4: 53
37	Test 5	Score: ____ Possible: ____	What do I need help with?	What's my plan?	What did I do to improve?

