Chapter 3 (part 2) – Chapter 4 (part 1): Derivative Applications Name_____

Assignment Sheet period 2 3 4

Assn	Topic	HW	Qty
Day 54 Friday 10 Nov	**§3.6 WS Supplement: Derivatives of Inverse Function Theorem** --- I know the relationship between the slope of a function at a given point on the function and the slope of the inverse function at the corresponding point on the inverse; the slopes are reciprocals.	pp 159-162: #57-59,63-68	
Day 55 Mon 13 Nov	**§3.6 WS Supplement: Derivatives of Inverse Function Theorem** --- If I know the equation of a function, using the Inverse Function Theorem, I can find the derivative of its inverse without knowing the inverse function.	WS pp 6-8 (hand numbered pages) finish completely	
Day 56 Tue 14 Nov	**§3.7 Implicit Differentiation** NOTES pp 1-2 Examples #1-5 I can implicitly differentiate equations that are not explicitly solved for y.	pp 164-165: #3,6,9,12,15,18,23,25,26,31	
Day 57 Wed 15 Nov	**§3.9 Linear Approximation using Tangent Lines** NOTES pp 3-4 #1-2 I can use a tangent line to approximate the value of a function and determine if the approximation is an over or under estimate.	HW in NOTES p 4 #3-6	
Day 57 **Repeat** Thu 16 Nov	**§3.9 Linear Approximation using Tangent Lines** NOTES pp 3-4 #1-2	HW in NOTES **Repeat Day** P 4#3-6	
Day 58 Fri 17 Nov	**§3.10 Mean Value Theorem** NOTES pp 5-6 all examples and sample problems. I can apply the MVT, stating prerequisites, calculating values and drawing conclusions	HW in NOTES p 7 all	
Day 59 Mon 27 Nov	**§4.1 Using the First and Second Derivatives p.186** NOTES: pp 8-10 Examples #1-6 -- I can use the 1st and 2nd derivatives to discuss the behavior of a function. -- I can use the 1st Derivative Test to justify relative extrema (maximum or minimum or terrace point)	pp 192-196: # 1-4, 9, 13, 31, 38, 43 NOTES: pp 8-10 Examples #1-6	
Day 60 Tue 28 Nov	**§4.1 Using the First and Second Derivatives p.186** NOTES: pp 11-13 Examples#1-3 Problems #1-5 -- I can use the 2nd Derivative Test to justify relative extrema -- I know my vocabulary: critical point, turning point, relative min/max, inflection point	pp 192-196: #24-30 all, 32 NOTES: pp 11-13 Examples#1-3 Problems #1-5	
Day 61 Wed 29 Nov	**§4.1 Using the First and Second Derivatives p.186** NOTES: p 14 Problems #6-10	pp 192-196: #7,8,16-19,39,45,46 NOTES: p 14 Problems #6-10	
Day 62 Thu 30 Nov	**§4.2 Optimization p.196** NOTES: p15 Problems #1-4 -- I can use calculus techniques to optimize a function, finding the absolute min/max by considering the critical points and the endpoints of the domain. -- I know my vocabulary: absolute/relative minimum & maximum.	pp 202-204: #4,6,12,14,15 NOTES: p15 Problems #1-4 ***Ch 3 TEST Corrections for Derivative Rules***	
Day 63 Fri 1 Dec	**§4.2 Optimization p.196** NOTES: p15 Problems #5-8	pp 202-204: #8,10,13,17,18 NOTES: p15 Problems #5-8	
Day 64 Mon 4 Dec	**§4.2 Optimization p.196** NOTES: p15 Problems #9-12	pp 202-204: #27,38,40,41 NOTES: p15 Problems #9-12	
Day 65 Tue 5 Dec	**Review** **Finish Review Sheet**	Ch 3 & Ch 4 (part 1) Review WS #1-18	
Day 66 Wed 6 Dec	**Ch 4 TEST (part 1)**		

Chapter 4 (part 2): Derivative Applications Name_____

Assignment Sheet period 2 3 4

Assn	Topic	HW	Qty
Day 67 Thu 7 Dec	**§4.3 Optimization & Modeling p.205** NOTES: pp 16-17 Example #1 & Problems #2-4 -- I can write an equation to model a situation using a secondary formula if needed and only one variable. I can use calculus methods to find and justify a maximum or minimum.	pp 210-215: #2,3,6,9 NOTES pp 16-17: Problems #1-4	
Day 68 Fri 8 Dec	**§4.3 Optimization & Modeling p.205** NOTES: pp 17 Problems #11,13,5,6 -- I can read critically, sketch graphs, write equations to model scenarios, do calculus, justify my conclusion using calculus and answer the question in the context of the problem scenario.	pp 210-215: #11,14,20, 23 NOTES pp 17: #11,13,5,6 ***Ch 3 & 4 TEST returned today. Corrections due Fri 15 Dec***	
Day 69 Mon 11 Dec	**§4.3 Optimization & Modeling p.205** NOTES: pp 17 Problems #10,7,8,9,12 -- I can read critically, sketch graphs, write equations to model scenarios, do calculus, justify my conclusion using calculus and answer the question in the context of the problem scenario.	pp 210-215: #17,24,25,28,42 NOTES pp 17: #10,7,8,9,12	
Day 70 Tue 12 Dec	**§4.6 Rates and Related Rates p.233** NOTES: pp 18-20: related rates #1-15 formulas & examples #1-3 -- I can read critically, sketch graphs, write equations to model scenarios, do calculus, justify my conclusion using calculus and answer the question in the context of the problem scenario.	HW in NOTES: p 20 #1-3,6 NOTES: pp 19-20: examples #1-3	
Day 71 Wed 13 Dec	**§4.6 Related Rates p.233** HW in NOTES: p 20 examples #4-5 -- I can use a correct formula, implicitly differentiate with respect to time, solve for a rate, evaluate using given information at a particular moment in time to find the rate and interpret the answer within the context of the problem scenario.	pp 237-242: #17,25,27,29 HW in NOTES: p 20 examples #4-5	
Day 72 Thu 14 Dec	**§4.6 Related Rates p.233** HW: p 20 problems #4-5 -- I can use a correct formula, implicitly differentiate with respect to time, solve for a rate, evaluate using given information at a particular moment in time to find the rate and interpret the answer within the context of the problem scenario.	pp 237-242: #18,33,35,38 HW NOTES: p 20 problems #4-5	
Day 73 Fri 15 Dec	**Derivative Applications Review** WS: Six Standard Related Rates Problems we are expected to know. #1-3 -- I can demonstrate my understanding of solving optimization problems on the review in preparation for the test.	Optimization Review #10-15 ***Ch 3 & Ch 4 Test Corrections Due Today***	
Day 74 Mon 18 Dec	**Derivative Applications Review** WS: Six Standard Related Rates Problems we are expected to know. #4-6 -- I can demonstrate my understanding of solving related rates problems on the review in preparation for the test.	Related Rates Review #1-9	
Day 75 Tue 19 Dec	**Final Derivative Applications Review**		
Day 76 Wed 20 Dec	**TEST Derivative Applications**		
Day 77 Thu 21 Dec	**AP Problems**		
Day 78 Fri 22 Dec	**AP Problems**		