

Calculus AB Schedule--Unit 3/Chapter 3 Derivatives (cont'd)

<u>Date</u>	<u>Lesson</u>	<u>HW Assignment</u>
15-Oct	Chapter 3 TEST	HW1 --Video on Chain Rule, p.153 #16,19
16-Oct	3.6 Chain Rule	HW2 --Video on Chain Rule w/Trig, p.153 #15,21,25
19-Oct	3.6 Chain Rule	HW3 --p.153 #29,55,56ce,72,73
20-Oct	3.6 Chain Rule	HW4 --Video on Implicit Differentiation, p.162 #1,3,5
21-Oct	3.7 Implicit Differentiation	HW5 --p.162 #9,11,21,27
22-Oct	NO SCHOOL-Parent/TeacherConferences	NO Additional Homework
23-Oct	3.7 Implicit Differentiation	HW6 --p.162 #24,25,59,61
26-Oct	3.7 Implicit Differentiation	HW7 --College Board AP Assignment #1
27-Oct	3.7 Implicit Differentiation <i>SAT for some Seniors</i>	HW8 --Video on Derivatives of Inverse Trig, p.170 #1,3,12
28-Oct	<i>Check & Connect Day</i> Unit 2 (Chapter 3) RETAKE TEST	NO Additional Homework
29-Oct	3.8 Derivative of Inverse Trig Functions	HW9 --Video on Derivative of Inverse Functions, AP Classroom problems
30-Oct	3.8 Derivative of Inverse Trig Functions	HW10 --Video on Derivatives of Exponential Functions, p.178 #1,4,11,13
2-Nov	3.9 Derivatives of Exp & Log Functions	HW11 --Video on Derivatives of Logarithmic Functions, p.178 #15,18,21
3-Nov	NO SCHOOL	NO Additional Homework
4-Nov	3.9 Derivatives of Exp & Log Functions	HW12 --p.178 #19,20,42(not domain),60,61
5-Nov	3.9 Derivatives of Exp & Log Functions Quick M/C Quiz	HW13 --p.178 #9,27,57,58,62
6-Nov	<i>Chapter 3 REVIEW</i>	HW14 --p.181 #9,11,15,23,35,41,67bcd
9-Nov	<i>Chapter 3 REVIEW</i>	Study for Test
10-Nov	Chapter 3 (cont'd) TEST	HW1 --Video on EVT & the Candidates Test
11-Nov	<i>Check & Connect Day</i> Chapter 3 (cont'd) TEST Corrections	NO Additional Homework
12-Nov	AP Activity: Chapter 3	AP Activity: Chapter 3 Due 11/19 HW1 --Video on EVT & the Candidates Test

Calculus AB Schedule--Unit 3/Chapter 3 Derivatives (cont'd)

Date

Lesson

HW Assignment

UNIT 3: Differentiation (cont'd)

FUN-3
Recognizing opportunities to apply derivative rules can simplify differentiation.

LEARNING OBJECTIVE	ESSENTIAL KNOWLEDGE
<p>FUN-3.C Calculate derivatives of compositions of differentiable functions.</p> <p>FUN-3.D Calculate derivatives of implicitly defined functions.</p> <p>FUN-3.E Calculate derivatives of inverse and inverse trigonometric functions.</p> <p>FUN-3.E Calculate derivatives of inverse and inverse trigonometric functions.</p>	<p>FUN-3.C.1 The chain rule provides a way to differentiate composite functions.</p> <p>FUN-3.D.1 The chain rule is the basis for implicit differentiation.</p> <p>FUN-3.E.1 The chain rule and definition of an inverse function can be used to find the derivative of an inverse function, provided the derivative exists.</p> <p>FUN-3.E.2 The chain rule applied with the definition of an inverse function, or the formula for the derivative of an inverse function, can be used to find the derivatives of inverse trigonometric functions.</p>

FUN-3
Recognizing opportunities to apply derivative rules can simplify differentiation.

LEARNING OBJECTIVE	ESSENTIAL KNOWLEDGE
<p>FUN-3.A Calculate derivatives of familiar functions.</p> <p>FUN-3.F Determine higher order derivatives of a function.</p>	<p>FUN-3.A.4 Specific rules can be used to find the derivatives for sine, cosine, exponential, and logarithmic functions.</p> <p>FUN-3.F.1 Differentiating f' produces the second derivative f'', provided the derivative of f' exists; repeating this process produces higher-order derivatives of f.</p> <p>FUN-3.F.2 Higher-order derivatives are represented with a variety of notations. For $y = f(x)$, notations for the second derivative include $\frac{d^2y}{dx^2}$, $f''(x)$, and y''. Higher-order derivatives can be denoted $\frac{d^n y}{dx^n}$ or $f^{(n)}(x)$.</p>