School Year 2022/2023 Mr.Gierut/Ms.Kane

Calculus A	B ScheduleUnit 3/	Chapter 3 Derivatives (cont'd)
ate	Lesson	HW Assignment

<u>Date</u>	<u>Lesson</u>	HW Assignment
6-Oct	3.1 Chain Rule	HW1 p.231 #15,21,23,39,41,51,73, p.235 AP Practice #10
7-Oct	3.1 Chain Rule	HW2 p.231 #47,49, p.235 AP Practice #3,4,5,6,11
10-Oct	NO SCHOOL	NO Additional Homework
11-Oct	3.1 Chain Rule	HW3 p.231 #35,65,69,79,83, 96abcd, p.235 AP Practice #8
12-Oct	1/2 Day Schedule PSAT for Juniors	NO Additional Homework
13-Oct	3.2 Implicit Differentiation Hispanic Heritage Assembly?	HW4 p.242 #7,15,21,p.245 AP Practice #1,3,6,9
14-Oct	3.2 Implicit Differentiation	HW5 p.242 #25,35,39,49, p.245 AP Practice #5,8
17-Oct	3.2 Implicit Differentiation	HW6 p.242 #47,71b,77ab, p.245 AP Practice #2,10
18-Oct	Late Start Schedule 3.2 Implicit Differentiation October IML Math Contest after school	HW7p.242 #22,27,49,55 Study for Quiz 3.1 & 3.2
19-Oct	3.3 Derivative of Inverse Trig Functions Quiz 3.1 & 3.2	HW8 p.250 #17,21,31,35,39, p.251 AP Practice #1,2,6
20-Oct	NO SCHOOL-Parent/TeacherConferences	NO Additional Homework
21-Oct	NO SCHOOL	NO Additional Homework
24-Oct	3.3 Derivative of Inverse Trig Functions	HW9 p.250 #5,6,47, p.251 AP Practice #3,7,8
25-Oct	Late Start Schedule 3.4 Derivatives of Logarithmic Functions	HW10 p.259 #9,17,25,27,45, p.261 AP Practice #2,5
26-Oct	3.4 Derivatives of Logarithmic Functions	HW11 p.259 #21,26, p.261 AP Practice #4,6,11,12
27-Oct	Unit 3 REVIEW	HW12 p.263 #3,13,14,26,35,37,41,45, p.264 AP Review #1,7, p.265 AP Cumulative Review #6
28-Oct	AP Activity: Unit 3	AP Activity: Unit 3 Due 11/5
31-Oct	Unit 3 REVIEW	STUDY for TEST!!!
1-Nov	Late Start Schedule Unit 3 TEST	NO Additional Homework

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Calculus AB Schedule--Unit 3/Chapter 3 Derivatives (cont'd) **HW Assignment** Date <u>Lesson</u>

UNIT 3: Differentiation (cont'd)

Recognizing opportunities to apply derivative rules can simplify differentiation.

Recognizing opportunities to apply derivative rules can simplify differentiation.

LEARNING OBJECTIVE

Calculate derivatives of compositions of differentiable functions.

FUN-3.D

Calculate derivatives of implicitly defined functions.

FUN-3.E

Calculate derivatives of inverse and inverse trigonometric functions.

Calculate derivatives of inverse and inverse trigonometric functions.

ESSENTIAL KNOWLEDGE

The chain rule provides a way to differentiate composite functions.

FUN-3.D.1

The chain rule is the basis for implicit differentiation.

The chain rule and definition of an inverse function can be used to find the derivative of an inverse function, provided the derivative exists.

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.

LEARNING OBJECTIVE

Calculate derivatives of familiar functions.

Determine higher order derivatives of a function.

ESSENTIAL KNOWLEDGE

Specific rules can be used to find the derivatives for sine, cosine, exponential, and logarithmic functions.

Differentiating f' produces the second derivative f'', provided the derivative of f'exists; repeating this process produces higherorder derivatives of f.

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