School Year 2023/2024 Ms. Kane/Mr. Gierut

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

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 7					6-Oct
Lesson					3.1 Chain Rule
HMWK					HW1 p.231 #15, 21,23,39,41,51,73, p.235 AP Practice #10
Week 8	9-Oct	10-Oct	11-Oct	12-Oct	13-Oct
Lesson	NO SCHOOL Indigineous People's Day & Columbus Day	3.1 Chain Rule	1/2 DAY PSAT for Some Juniors	3.1 Chain Rule Hispanic Heritage Assembly?	3.2 Implicit Differentiation
HMWK	No Additional Homework	HW2 p.231 #47, 49, p.235 AP Practice #3,4,5,6,11	No Additional Homework	HW3 p.231 #35, 65,69,79,83, 96abcd, p.235 AP Practice #8	HW4 p.242 #7, 15,21,p.245 AP Practice #1,3,6,9
Week 9	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct
Lesson	3.2 Implicit Differentiation	LATE START 3.2 Implicit Differentiation	3.2 Implicit Differentiation Quiz 3.1 & 3.2	NO SCHOOL Parent / Teacher / Student Conferences	NO SCHOOL
HMWK	HW5 p.242 #25, 35,39,49, p.245 AP Practice #5,8	HW6p.242 #47, 71b,77ab, p.245 AP Practice #2,10 Study for Quiz 3.1 & 3.2 October IML Math Contest after school	HW7 p.242 #22,27,49,55	No Additional Homework	No Additional Homework
Week 10	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct
Lesson	3.3 Derivative of Inverse Trig Functions	3.3 Derivative of Inverse Trig Functions	3.4 Derivatives of Logarithmic Functions	3.4 Derivatives of Logarithmic Functions	Unit 3 REVIEW
HMWK	HW8- -p.250 #17, 21,31,35,39, p.251 AP Practice #1,2,6	HW9 p.250 #5, 6,47, p.251 AP Practice #3,7,8	HW10 p.259 #9, 17,25,27,45, p.261 AP Practice #2,5	HW11 p.259 #21,26, p.261 AP Practice #4,6,11, 12	HW12p.263 #3, 13,14,26,35,37,41, 45, p.264 AP Review #1,7, p.265 AP Cumulative Review #6

School Year 2023/2024 Ms. Kane/Mr. Gierut

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

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 11	30-Oct	31-Oct	1-Nov		
Lesson	Unit 3 REVIEW	LATE START Unit 3 TEST	AP Activity: Unit 3		
HMWK	STUDY for TEST!!!	No Additional Homework	AP Activity: Unit 3 due Nov 8		

School Year 2023/2024 Ms. Kane/Mr. Gierut

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

	Monday	Tuesday	Wednesday	Thursday	Friday
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UNIT 3: Differentiation (cont'd)

FUN-3

Recognizing opportunities to apply derivative rules can simplify differentiation.

LEARNING OBJECTIVE

FUN-3.0

Calculate derivatives of compositions of differentiable functions.

FUN-3.D

Calculate derivatives of implicitly defined functions.

FUN-3.

Calculate derivatives of inverse and inverse trigonometric functions.

FUN-3.E

Calculate derivatives of inverse and inverse trigonometric functions.

ESSENTIAL KNOWLEDGE

FUN-3.C.1

The chain rule provides a way to differentiate composite functions.

FUN-3.D.1

The chain rule is the basis for implicit differentiation.

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.

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.

FUN-3

Recognizing opportunities to apply derivative rules can simplify differentiation.

LEARNING OBJECTIVE

UN-3.A

Calculate derivatives of familiar functions.

FUN-3.F

Determine higher order derivatives of a function.

ESSENTIAL KNOWLEDGE

FUN-3.A.

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

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.

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 $\frac{d^ny}{dx^n}$ or $f^{(n)}(x)$.