

Calculus AB Schedule-- Unit 7 Applications of the Definite Integral

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 23				22-Feb	23-Feb
Lesson				8.1 Area Between Graphs	8.1 Area Between Graphs Black History Month Assembly?
HMWK				HW1 --p.579 #1,3,5,8,11, AP Practice #1	HW2 --p.579 #13, 15, AP Practice #2,5,9 (check all answers in calculator)
Week 24	26-Feb	27-Feb	28-Feb	1-Mar	1-Mar
Lesson	8.1 Area Between Graphs	LATE START 8.4 Volume of a Solid: Slicing	8.4 Volume of a Solid: Slicing Quiz 8.1	8.2 Volume of a Solid: Disks	8.2 Volume of a Solid: Disks
HMWK	HW3 --p.579 #21, 23, AP Practice #3, Calculator #58c,59c, AP Practice #10	HW4 --p.610 #7, AP Practice #2,5 Study for Quiz 8.1	HW5 --p.610 #8, AP Practice #3,8ad	HW6 --p.593 #1,5, 13,23,38, AP Practice #1	HW7 --p.593 #6,7, 15,41, AP Practice #2
Week 25	4-Mar	5-Mar	6-Mar	7-Mar	8-Mar
Lesson	NO SCHOOL -- Casimir Pulaski Day	8.2 Volume of a Solid: Washers	8.2 Volume of a Solid: Washers	8.2 Volume of a Solid: Disks & Washers	<i>Unit 7 Review (Book Chapter 8)</i>
HMWK	No Additional Homework	HW8 --p.593 #17, 33,34,39, AP Practice #8	HW9 --p.593 #10, 42,50abc, AP Practice #4,9, Calculator #43,53	HW10 --p.593 #9, 13,35,40, Calculator p.593 #46	HW11 --p.632 #1,5, 6,8, AP Practice #1,2,7
Week 26	11-Mar	12-Mar	13-Mar		
Lesson	<i>Unit 7 Review (Book Chapter 8)</i>	NO SCHOOL -- Teacher Institute Day	Unit 7 TEST		
HMWK	Study for Test	No Additional Homework	No Additional Homework		

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Unit 7: Applications of Definite Integrals

CHA-5

Definite integrals allow us to solve problems involving the accumulation of change in area or volume over an interval.

LEARNING OBJECTIVE

CHA-5.A

Calculate areas in the plane using the definite integral.

CHA-5.A

Calculate areas in the plane using the definite integral.

CHA-5.A

Calculate areas in the plane using the definite integral.

CHA-5.B

Calculate volumes of solids with known cross sections using definite integrals.

CHA-5.B

Calculate volumes of solids with known cross sections using definite integrals.

ESSENTIAL KNOWLEDGE

CHA-5.A.1

Areas of regions in the plane can be calculated with definite integrals.

CHA-5.A.2

Areas of regions in the plane can be calculated using functions of either x or y .

CHA-5.A.3

Areas of certain regions in the plane may be calculated using a sum of two or more definite integrals or by evaluating a definite integral of the absolute value of the difference of two functions.

CHA-5.B.1

Volumes of solids with square and rectangular cross sections can be found using definite integrals and the area formulas for these shapes.

CHA-5.B.2

Volumes of solids with triangular cross sections can be found using definite integrals and the area formulas for these shapes.

CHA-5.B.3

Volumes of solids with semicircular and other geometrically defined cross sections can be found using definite integrals and the area formulas for these shapes.

CHA-5.C

Calculate volumes of solids of revolution using definite integrals.

CHA-5.C

Calculate volumes of solids of revolution using definite integrals.

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Calculate volumes of solids of revolution using definite integrals.

CHA-5.C

Calculate volumes of solids of revolution using definite integrals.

CHA-5.C.1

Volumes of solids of revolution around the x - or y -axis may be found by using definite integrals with the disc method.

CHA-5.C.2

Volumes of solids of revolution around any horizontal or vertical line in the plane may be found by using definite integrals with the disc method.

CHA-5.C.3

Volumes of solids of revolution around the x - or y -axis whose cross sections are ring shaped may be found using definite integrals with the washer method.

CHA-5.C.4

Volumes of solids of revolution around any horizontal or vertical line whose cross sections are ring shaped may be found using definite integrals with the washer method.