Third Quarter Assignments

IB/AP Calculus AB

Wed., Jan. 8 §6.3	***Goals***	Use both parts of the Fundamental Theorem of Calculus.
	Assignment	**§6.3** 21, 27, 29, 35, 37, 55, AP4, AP11
Thurs., Jan. 9 §6.3	***Goals***	Understand how accumulation problems are tested on the AP Calculus exam.
	Assignment	**Accumulation** problems
Fri., Jan. 10 §6.3	***Goals***	Use both parts of the Fundamental Theorem of Calculus.
	Assignment	**§6.3** AP8, AP10, AP12
Mon., Jan. 13 §6.4	***Goals***	Use properties of definite integrals.
	Vocabulary	order of integration, additivity
	Assignment	**§6.4** 1, 2, 3, 7, 9, 15
Tues., Jan. 14 §6.4; **AP Quiz 4**	***Goals***	Use properties of definite integrals. Find the average value of a function.
	Vocabulary	Mean Value Theorem for Integrals
	Assignment	**§6.4** 65, 75, 89, AP1, AP4, AP5, AP6, AP9, AP13; **AP Quiz 4**
W-Th, Jan. 15-16 §6.4, 6.5	***Goals***	Find the average value of a function. Solve problems involving kinematics. Use *u*-substitution to reverse the chain rule.
	Vocabulary	*u*-substitution
	Assignment	**§6.4** 85, AP11, AP15; **§6.5** 23, 27, 29, 35, 41, 49
Fri., Jan. 17 **Activity day** AP progress check	***Goals***	Evaluate integrals. Use the Fundamental Theorem of Calculus.
	Assignment	AP Classroom Unit 6 Progress Check: MCQ part A to be worked on *in class* if you're not at an activity.
Tues., Jan. 21 §6.5	***Goals***	Use *u*-substitution to reverse the chain rule.
	Assignment	**§6.5** 69, 71, 73, 103, 105
W-Th, Jan. 22-23 §6.5, 6.9	***Goals***	Use *u*-substitution to reverse the chain rule. Rewrite integrands using long division.
	Assignment	**§6.5** AP4, AP5, AP8, AP9, AP12; **§6.9** 47, 49, AP3, AP5
Fri., Jan. 24 §6.9	***Goals***	Rewrite integrands using completing the square.
	Vocabulary	completing the square
	Assignment	**§6.9** 5, 11, 51, AP1
Mon., Jan. 27 Review	***Goals***	Evaluate definite integrals and use them to solve problems.
	Assignment	Study for the test.
Tues., Jan. 28 Review	***Goals***	Evaluate definite integrals and use them to solve problems.
	Assignment	Study for the test.
W-Th, Jan. 29-30 **Test, Ch. 6**	***Goals***	Evaluate definite integrals and use them to solve problems.
	Assignment	**Test, The Integral, both parts** An IB review worksheet is due next class.
Fri., Jan. 31 AP FR modules 3; IB review ws 5 due	**IB review worksheet 5 is due at the beginning of class. The fourth and final AP FR scoring module will be available on Schoology. I will be compiling an FAQ over spring break if anyone asks questions.**	
	Goals	Understand how applying procedures and interpretation of expressions in context are tested on the AP Calculus exam.
	Assignment	Do the **online survey** about what you learned from this AP free response module. The link will be on Schoology. Study for the test.
Mon., Feb. 3 §7.1	***Goals***	Verify solutions of differential equations. Find general and particular solutions of differential equations.
	Vocabulary	differential equation, general solution, particular solution, order of a differential equation
	Assignment	**§7.1** 3, 4, 15, 21, 31
Tues., Feb. 4 §7.1, 7.2	***Goals***	Verify solutions of differential equations. Find general and particular solutions of differential equations.
	Vocabulary	separable differential equation, separation of variables
	Assignment	**§7.1** AP1, AP2, AP3, AP4; **§7.2** 3, 7
W-Th, Feb. 5-6 §7.2	***Goals***	Solve separable differential equations.
	Assignment	**§7.2** 5, 21, 27, AP1, AP2, AP5, AP6
Fri., Feb. 7 §7.3	***Goals***	Understand and solve problems involving slope fields.
	Vocabulary	slope field, isocline
	Assignment	**§7.3** 7, 13, 17, AP1, AP2
Mon., Feb. 10 §7.3	***Goals***	Understand and solve problems involving slope fields.
	Assignment	**§7.3** 9, 18, AP3
Tues., Feb. 11 Review; **AP Quiz 5**	***Goals***	Solve simple differential equations. Understand and solve problems involving slope fields.
	Assignment	**AP Quiz 5**; study for the quiz.
W-Th, Feb. 12-13 Review; **Quiz, Ch. 7**	***Goals***	Solve simple differential equations. Understand and solve problems involving slope fields.
	Assignment	**Quiz, Differential Equations**

Fri., Feb. 14 **Activity day** AP progress check	***Goals*** ***Assignment***	Solve simple differential equations. Understand and solve problems involving slope fields. AP Classroom Unit 7 Progress Check: MCQ to be worked on *in class* if you are not at an activity.
Tues., Feb. 18 §8.1	***Goals*** ***Assignment***	Find the area between two curves. **§8.1** 7, 21, 61, AP5 For this entire unit, you should use your calculator to evaluate the appropriate integrals after setting them up except for AP problems without a graphing utility icon.
W-Th, Feb. 19-20 §8.1, 8.2	***Goals*** ***Vocabulary*** ***Assignment***	Find the area between two curves. Calculate the volumes of solids of revolution. solid of revolution, disk method **§8.1** 15, AP3, AP4; **§8.2** 5, 13, AP1 Again, for this entire unit, you should use your calculator to evaluate the appropriate integrals after setting them up except for AP problems without a graphing utility icon.
Fri., Feb. 21 §8.2	***Goals*** ***Assignment***	Calculate the volumes of solids of revolution. **§8.2** 7, 31, 41. Evaluate the integrals with a calculator after you set them up.
Mon., Feb. 24 §8.2	***Goals*** ***Vocabulary*** ***Assignment***	Calculate the volumes of solids of revolution. washer method **§8.2** 9, 17, 19, 21, AP4. ***Note:*** for #9 and #19, you should evaluate the integrals with a calculator after you set them up.
Tues., Feb. 25 §8.2	***Goals*** ***Assignment***	Calculate volumes of solids of revolution. **§8.2** AP6, AP8, AP10
W-Th, Feb. 26-27 §8.4	***Goals*** ***Vocabulary*** ***Assignment***	Calculate volumes of solids with known cross-section. cross-section **§8.4** 9, 17, AP2, AP5, AP6, AP8abd. ***Note:*** For #9, only write the integrals; do not evaluate them.
Fri., Feb. 28 Review	***Goals*** ***Assignment***	Apply integration in a variety of contexts. Study for the test.
Mon., Mar. 3 Review; **AP Quiz 6**	***Goals*** ***Assignment***	Apply integration in a variety of contexts. **AP Quiz 6;** study for the test.
Tues., Mar. 4 **Quiz, Ch. 8**	***Goals*** ***Assignment***	Apply integration in a variety of contexts. **Quiz, Applications of the Integral** (this is the last thing that counts on the third quarter)
W-Th, Mar. 5-6 **AP MC no calculator practice exam**, Number & algebra, functions	***Goals*** ***Assignment***	Determine what Number & Algebra and Functions topics you need to know for the IB exam. **Practice Exam, AP Calculus AB multiple choice section, *no* calculator;** **Number & Algebra, Functions** worksheet
Fri., Mar. 7 Geometry & trig	***Goals*** ***Vocabulary*** ***Assignment***	Determine the geometry and trigonometry topics you need to know for the IB exam. amplitude, period **Geometry and Trigonometry** worksheet
Mon., Mar. 10 Geometry & trig; **AP Quiz 7**	***Goals*** ***Assignment***	Determine the geometry and trigonometry topics you need to know for the IB exam. **AP Quiz 7; Geometry and Trigonometry** worksheet
Tues., Mar. 11 Probability	***Goals*** ***Vocabulary*** ***Assignment***	Decide what probability topics you need to know for the IB exam. independent, mutually exclusive, conditional probability, intersection, union **Probability and the Binomial Distribution** worksheet
W-Th, Mar. 12-13 **AP Free Response practice exam**	***Goals*** ***Assignment***	Determine the areas of AP Calculus that need the most review before the exam in May. **Practice Exam, AP Calculus Free Response Questions**
Fri., Mar. 14 **Activity day** **End of third quarter**	**Friday, March 14, is the last day of the third quarter. The last assignment that counts on the quarter is the quiz on Ch. 8.** (The entire review unit will count on the fourth quarter.) ***Goals*** ***Assignment***	Determine the areas of AP Calculus that need the most review before the exam in May. Make a plan to improve your understanding of AP calculus topics