

# Third Quarter Assignments

## BHS/SA AP Calculus AB (2nd pd)

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

Fri., Feb. 14 <b>Activity day</b> AP progress check	<b>Goals</b> Solve simple differential equations. Understand and solve problems involving slope fields. <b>Assignment</b> AP Classroom Unit 7 Progress Check: MCQ to be worked on <i>in class</i> if you're not at an activity.
Tues., Feb. 18 §8.1	<b>Goals</b> Find the area between two curves. <b>Assignment</b> §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.
Thurs., Feb. 20 §8.1, 8.2	<b>Goals</b> Find the area between two curves. Calculate the volumes of solids of revolution. <b>Vocabulary</b> solid of revolution, disk method <b>Assignment</b> §8.1 AP3, AP4, AP5; §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	<b>Goals</b> Calculate the volumes of solids of revolution. <b>Assignment</b> §8.2 7, 31, 41. Evaluate the integrals with a calculator after you set them up.
Mon., Feb. 24 §8.2	<b>Goals</b> Calculate the volumes of solids of revolution. <b>Vocabulary</b> washer method <b>Assignment</b> §8.2 9, 17, 19, 21, AP4. <i>Note:</i> for #9 and #19, you should evaluate the integrals with a calculator after you set them up.
Tues., Feb. 25 §8.2	<b>Goals</b> Calculate volumes of solids of revolution. <b>Assignment</b> §8.2 AP8, AP10
Thurs., Feb. 27 §8.4	<b>Goals</b> Calculate volumes of solids with known cross-section. <b>Vocabulary</b> cross-section <b>Assignment</b> §8.4 9, 17, AP2, AP5, AP6, AP8abd. <i>Note:</i> For #9, only write the integrals; do not evaluate them.
Fri., Feb. 28 Review	<b>Goals</b> Apply integration in a variety of contexts. <b>Assignment</b> Study for the test.
Mon., Mar. 3 Review; <b>AP Quiz 6</b>	<b>Goals</b> Apply integration in a variety of contexts. <b>Assignment</b> <b>AP Quiz 6</b> ; study for the test.
Tues., Mar. 4 <b>Quiz, Ch. 8</b>	<b>Goals</b> Apply integration in a variety of contexts. <b>Assignment</b> <b>Quiz, Applications of the Integral</b> (this is the last thing that counts on the third quarter)
Thurs., Mar. 6 <b>AP MC no calculator practice exam, Unit 1</b>	<b>Goals</b> Determine what Unit 1 (Limits and Continuity) topics you need to relearn for the AP exam. <b>Assignment</b> <b>Practice Exam, AP Calculus AB multiple choice section, no calculator; Unit 1 (Limits and Continuity)</b> worksheet
Fri., Mar. 7 Unit 1	<b>Goals</b> Determine what Unit 1 (Limits and Continuity) topics you need to relearn for the AP exam. <b>Assignment</b> <b>Unit 1 (Limits and Continuity)</b> worksheet
Mon., Mar. 10 Unit 2; <b>AP Quiz 7</b>	<b>Goals</b> Determine what Unit 2 (Differentiation: Definition and Fundamental Properties) topics you need to relearn for the AP exam. <b>Assignment</b> <b>AP Quiz 7; Unit 2 (Differentiation: Definition and Fundamental Properties)</b> worksheet
Tues., Mar. 11 Unit 2	<b>Goals</b> Determine what Unit 2 (Differentiation: Definition and Fundamental Properties) topics you need to relearn for the AP exam. <b>Assignment</b> <b>Unit 2 (Differentiation: Definition and Fundamental Properties)</b> worksheet
Thurs., Mar. 13 <b>AP Free Response practice exam</b>	<b>Goals</b> Determine the areas of AP Calculus that need the most review before the exam in May. <b>Assignment</b> <b>Practice Exam, AP Calculus Free Response Questions</b>
Fri., Mar. 14 <b>Activity day</b> <b>End of third quarter</b>	<b>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.</b> (The entire review unit will count on the fourth quarter.) <b>Goals</b> Determine the areas of AP Calculus that need the most review before the exam in May. <b>Assignment</b> Make a plan to improve your understanding of AP calculus topics