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| D.Q.’s | Name | Pd. |
| AP Calculus AB: Limits |
| ***Unit Essential Question****:* ***What is a limit and how do I solve them?*** |
| Day | Lesson | Assignment |
| Day 1WednesdayO8.O1.18 | Handbook, Syllabus, Grading Policy Review Unit Circle & Piecewise FunctionsStandard: M.CALC.1.22 Functions/Relations: Recognize The learner will be able to identify and apply non-calculus properties of algebraic, trigonometric, exponential, and logarithmic function.Instruction: Discussion & Group PracticeDifferentiation: Individual pacing/questions | Worksheet: Graphing PiecewiseWorksheet: Practice Unit Circle |
| Day 2ThursdayO8.O2.18 | Review ln, e, power rules, composition, graph movement & basic factoring Standard: M.CALC.1.22 & M.CALC.124The learner will be able to graph functions and relationship with respect to these characteristics and identify these characteristics from graphs.Instruction: Discussion & Group PracticeDifferentiation: Individual pacing/questions | Worksheet: Pre-Calculus Review |
| Day 3FridayO8.O3.18 | How do I find Limits Graphically & Numerically?Standard: M.CALC.1.4 Limits: Approximate/Graphs/ The learner will be able to estimate limits from graphs or tables of data. Estimate graphs from limits. Instruction: Discussion & Group PracticeDifferentiation: Individual pacing/questions | $$\frac{}{N}$$$$\frac{}{18}$$$$\frac{}{12}$$D.Q.: Unit CircleSupp:One-sided limitsSupp:From TableSupp:From TableH.W. (2.2) Pgs.96-97:4-9, 11, 15-18, & 21 |
| Day 4MondayO8.O6.18 | How do you find Limits Algebraically and Using Limit Laws? Standard: M.CALC.1.1 Limits: Evaluate The learner will be able to evaluate the limits of a function algebraically and apply the properties of limits, including one-sided limits. Instruction: Go over homework, Discussion, & Group PracticeDifferentiation: Individual pacing/questions | $$\frac{}{N}$$$$\frac{}{20}$$H.W. (2.3) Pgs.106-107:1, 2, 11-23, 25, 28, 30, 37, & 38 |
| Day 5TuesdayO8.O7.18 | How do I determine Continuity ? Standard: M.CALC.1.14 Applying Calculus Concepts: The learner will be able to apply the definition of continuity to a function at a point. Determine if a function is continuous over an interval. Instruction: Go over homework,Complete lab as groups, Discussion, & Group PracticeDifferentiation: Individual pacing/questions.  |  D.Q. Graphing from LimitsSupp: Continuity$$\frac{}{ 60 }$$H.W. (2.5) Pgs. 127-293, 18, 20, 21, 23, 24, 41, 43, 45, & 46 |
| Day 6WednesdayO8.O8.18 | How do I determine limits at infinity or to infinity?Standard: M.CALC.1.13 Limits: Infinity The learner will be able to describe asymptotic behavior in terms of limits involving infinity. Instruction: Go over homework, Discussion, & Group PracticeDifferentiation: Individual pacing/questions.  | D.Q. Limits GNA$$\frac{}{N}$$$$\frac{}{17}$$(2.2) Pgs. 96-983, 29-34, & 36-37(2.6) Pg. 1401, 4, 5-10 |
| Day 7ThursdayO8.O9.18 | How do I determine limits at infinity or to infinity?Standard: M.CALC.1.13 Limits: Infinity The learner will be able to describe asymptotic behavior in terms of limits involving infinity. Instruction: Go over homework, Discussion, & Group PracticeDifferentiation: Individual pacing/questions.   | Supp: Graphs from $$\frac{}{ }$$$$\frac{}{16}$$ConditionsH.W. (2.6) Pg. 14115-24, 29, 31, 32, 35, 36, & 38D.Q: Limits at Infinity |
| Day 8FridayO8.1O.18 | What are the special trig. limits? What is the intermediate value theorem?Standard: M.CALC.1.1 Limits: Evaluate The learner will be able to evaluate the limits of a function algebraically and apply the properties of limits, including one-sided limits.Instruction: Go over homework, Discussion, & Group PracticeDifferentiation: Individual pacing/questions.   | Supp: Trig. Limits & IVT$$\frac{}{N}$$$$\frac{}{ 16 }$$$$\frac{}{4}$$H.W. (2.5) Pg. 12949-52 |
| Day 9MondayO8.13.18 |  How do you approximate instant rate of change?Standard: M.CALC.1.2 Derivatives: Define The learner will be able to approximate the rate of change at a point, given the graph of a function or a table of values. define the derivative of a function in various ways. The limit of the difference quotient. The slope of the tangent line at a point. Instantaneous rate of change. The limit of the average rate of change. Instruction: Go over homework, Discussion, & Group PracticeDifferentiation: Individual pacing/questions.  | D.Q. Continuity$$\frac{}{N}$$$$\frac{}{ 7 }$$$$\frac{}{10}$$Supp: Rate of ChangeH.W. (2.7)Pgs. 151-15242, 43, 49, & 50H.W. (2.8)Pgs. 162-1641 & 35 |
| Day 10TuesdayO8.14.18 | How do you approximate a derivative from a graph of a function?Standard: M.CALC.1.2 Derivatives: Define The learner will be able to approximate the rate of change at a point, given the graph of a function or a table of values. define the derivative of a function in various ways. The limit of the difference quotient. The slope of the tangent line at a point. Instantaneous rate of change. The limit of the average rate of change. Instruction: Go over homework, Discussion, & Group PracticeDifferentiation: Individual pacing/questions.  | D.Q. IVT$$\frac{}{N}$$$$\frac{}{ }$$$$\frac{}{10}$$Supp: Rate of ChangeH.W. (2.7)Pgs. 151-15217H.W. (2.8)Pgs. 162-1643, 4, 6, 8-10, 37-40 |
| Day 11WednesdayO8.15.18 | Review Limits, Continuity, & R.O.C:Standard: M.CALC.1.13 Limits: Infinity The learner will be able to describe asymptotic behavior in terms of limits involving infinity. Instruction: Go over homework, Discussion, & Group PracticeDifferentiation: Individual pacing/questions.  |

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| D.Q. ROC$$\frac{}{ 40 }$$ Supp: Review |
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| Day 12Thursday Notecards: O8.16.18 |  Test: Limits & Continuity:Standard: M.CALC.1.13 Limits: Infinity The learner will be able to describe asymptotic behavior in terms of limits involving infinity. Instruction: Go over homework, Discussion, & Group PracticeDifferentiation: Individual pacing/questions.  |   |

Notebook grade: 