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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 1  Wednesday  O8.O1.18 | Handbook, Syllabus, Grading Policy  Review Unit Circle & Piecewise Functions  Standard: 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 Practice  Differentiation: Individual pacing/questions | | Worksheet: Graphing Piecewise  Worksheet: Practice Unit Circle | |
| Day 2  Thursday  O8.O2.18 | Review ln, e, power rules, composition, graph movement & basic factoring  Standard: M.CALC.1.22 & M.CALC.124  The learner will be able to graph functions and relationship with respect to these characteristics and identify these characteristics from graphs.  Instruction: Discussion & Group Practice  Differentiation: Individual pacing/questions | | Worksheet: Pre-Calculus Review | |
| Day 3  Friday  O8.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 Practice  Differentiation: Individual pacing/questions | | D.Q.: Unit Circle  Supp:One-sided limits  Supp:From Table  Supp:From Table  H.W. (2.2)  Pgs.96-97:  4-9, 11, 15-18, & 21 | |
| Day 4  Monday  O8.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 Practice  Differentiation: Individual pacing/questions | | H.W. (2.3)  Pgs.106-107:  1, 2, 11-23, 25, 28, 30, 37, & 38 | |
| Day 5  Tuesday  O8.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 Practice  Differentiation: Individual pacing/questions. | | D.Q. Graphing from Limits  Supp: Continuity  H.W. (2.5)  Pgs. 127-29  3, 18, 20, 21, 23, 24, 41, 43, 45, & 46 | |
| Day 6  Wednesday  O8.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 Practice  Differentiation: Individual pacing/questions. | | D.Q. Limits GNA  (2.2) Pgs. 96-98  3, 29-34, & 36-37  (2.6) Pg. 140  1, 4, 5-10 | |
| Day 7  Thursday  O8.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 Practice  Differentiation: Individual pacing/questions. | | Supp: Graphs from  Conditions  H.W. (2.6) Pg. 141  15-24, 29, 31, 32, 35, 36, & 38  D.Q: Limits at Infinity | |
| Day 8  Friday  O8.1O.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 Practice  Differentiation: Individual pacing/questions. | | Supp: Trig. Limits & IVT  H.W. (2.5)  Pg. 129  49-52 | |
| Day 9  Monday  O8.13.18 | 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 Practice  Differentiation: Individual pacing/questions. | | D.Q. Continuity  Supp: Rate of Change  H.W. (2.7)  Pgs. 151-152  42, 43, 49, & 50  H.W. (2.8)  Pgs. 162-164  1 & 35 | |
| Day 10  Tuesday  O8.14.18 | 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 Practice  Differentiation: Individual pacing/questions. | | D.Q. IVT  Supp: Rate of Change  H.W. (2.7)  Pgs. 151-152  17  H.W. (2.8)  Pgs. 162-164  3, 4, 6, 8-10, 37-40 | |
| Day 11  Wednesday  O8.15.18 | 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 Practice  Differentiation: Individual pacing/questions. | | |  | | --- | | D.Q. ROC    Supp: Review | |  | | |
| Day 12  Thursday  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 Practice  Differentiation: Individual pacing/questions. | |  | |

Notebook grade: 