# AP Calculus AB Chapter 2A Syllabus Revised* 

| Day | Date | Sections | Description | Homework |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  | 2.1 | Definition of a Derivative | - Pg. 131: (17, 21, 29, 45-48, 61, 67, 69, 79, 88, 89 <br> - SET A (see below) |
| 2 |  | 2.2 | Basic Differentiation Rules | - Pg. 131: $(33,43,83,90)$ <br> - Pg. 143: (3-51 eoo, 55a, 57a, 63, 64, 65, 69, 71, 111) |
| 3 |  |  | $\begin{aligned} & \text { Quiz: } 2.1 \& 2.2 \\ & \operatorname{FR}(1,4,16) \end{aligned}$ | - $\quad$ Pg. 133 (83) <br> - Pg. 146: $(110,111)$ <br> - FR 2,3 |
| 4 |  | 2.3 | Product and Quotient Rules FR 5, 18 | $\begin{aligned} & \text { - Pg. 154: }(5,11,27,29 a, 35,45,47,51,67, \\ & \text { 73a, 75a, 79, 87, 97, 107,109-112, 138, } \\ & \text { 139,141) } \end{aligned}$ |
| 5 |  | 2.4 | Chain Rule - polynomials, rationals, trigonometry <br> FR 15 | - Pg. 168: (7-27 odd, 47-67eoo, 117-121 odd, 129, 159-163) |
| 6 |  | 2.4 | Chain Rule - exponentials, logarithms FR 12 | - Pg. 168: $(43,45,71,75,81,87,89,91$, 99, 141, 145, 151, 153, 191-193) |
| 7 |  |  | Quiz: 2.3 \& 2.4 | - Ch 2A Review WKST <br> - FR 6, 11, 17 |
| 8 |  |  | Ch 2A Review | - Ch 2A Review WKST FR 6, 11, 17 |
| 8 |  |  | Ch 2a Test |  |

eoo- "Every Other Odd"
"Odd Answers can be found at: www.CalcChat.com

## Set A

What does each expression mean?
a) $\lim _{h \rightarrow 0} \frac{f(7+h)-f(7)}{h}=-1$
b) $\lim _{x \rightarrow 3} \frac{f(x)-f(3)}{x-3}=0$
c) $f^{\prime}(5)=6$


## Set A Answers

a) The tangent line to the function $f(x)$ at the point $x=7$ has a slope of -1 . OR
The slope of $f(x)$ at the point $x=7$ is -1
b) The tangent line to the function $f(x)$ at the point $x=3$ has a slope of 0 OR
The slope of $f(x)$ at the point $x=3$ is 0 .
c) The tangent line to the function $f(x)$ at the point $x=5$ has a slope of 6 .

The slope of $f(x)$ at the point $x=5$ is 6 .

