AP Calculus BC   Name: _____

Stuff You Must Know Cold

1. What does an inflection point signify?

2. Does y'' need to exist for there to be an inflection point??

3. Where would you look to find max/min of f(x) on an interval [a, b]?

4. How would you justify that a value is a maximum?

5. What would you do to find intervals where f(x) is increasing?

6. What would you do to find intervals where the slope of f(x) is increasing?

7. How would you find the average rate of change of f(x) on [a, b]?

8. How would you find the average value of f(x) on [a, b]?

9. How would you find the average velocity of a particle on [a, b] given s(t), the position function?

10. How would you find the average velocity of a particle on [a, b] given v(t), the velocity function?

Take the derivative of the following:

11. x^n

12. $\sin x$

13. $\cos x$

14. $\ln x$

15. $\csc x$

16. $\csc^{-1} x$

17. $\cot^{-1} x$

18. a^x

19. $\log_a x$

20. $\cos^{-1} x$