AP Calculus AB Fall Exam Topics 2020

- 1) Limits (ch. 1)
- 2) L'Hopital's Rule (Ch. 2)
- 3) Continuity and Continuity Conditions (ch. 1.4)
- 4) Finding Derivatives, Tangent Line Equations (Ch. 2)

*Product Rule, Quotient Rule, Chain Rule, Implicit Differentiation

- 5) Finding Average Rate of Change (Ch. 2)
- 6) Particle Motion (Position Velocity Acceleration) Ch. 2

*Velocity sign line, intervals moving left/right, increasing/decreasing speed/velocity

7) Continuous/Differentiable Piecewise Functions (Ch. 2)

- 8) Related Rates (2.6)
- 9) Linear Approximation (Ch. 3)
- 10) Theorems: IVT, EVT, Rolle's, MVT (Ch. 3)
- 11) Interpreting Derivative Graphs : f'(x) and f''(x) (Ch 3)
- 12) First Derivative Test, First derivative sign line, 2nd derivative sign line (Ch. 3)

* Relative extrema, intervals increase/decrease

13) New Derivative Rules (Ch. 2, 5)

*Derivative Rules involving Trig, Arc Trig, Logs, Exponentials

- 14) Expanding Log terms before finding derivative (Ch. 5)
- 15) Log Differentiation (Ch. 5)
- 16) Finding Derivative of Inverse at a point (Ch. 5)