

Unit 1 Limits Test Topics

- 1) Evaluate Limits Algebraically (Real #'s, Approaching Infinity, One-Sided limits)
- 2) Evaluating Limits Algebraic with hole in graph: Apply methods of Factoring, Conjugates, and/or Common Denominator
- 3) Identify limits and order pairs from a graph
- 4) Sketch a function graph given limit properties.
- 5) Use Continuity conditions with a piecewise function to determine continuity/discontinuity (and categorize the type of discontinuity)
- 6) Apply Intermediate Value Theorem to guarantee a value
- 7) Find Horizontal Asymptotes (Radical in denominator) ex. $f(x) = \frac{3x}{\sqrt{5x^2-4}}$
- 8) Comparative Growth Rate: example: $\lim_{n \rightarrow \infty} \frac{e^{2x}}{\sqrt{2x+1000}}$