

Math 1121 mastery checklist

		points		
Limits & Continuity		1	2	3
1	Limits on graphs			
2	Limits algebraically			
3	Limits at infinity			
4	Continuity			
5	Piecewise functions			

The Derivative				
6	Average rate of change			
7	Definition of the derivative			
8	Derivatives on graphs			
9	Derivatives in word problems			
10	Derivatives of polynomials (power rule)			
11	Product rule			
12	Quotient rule			
13	Chain rule			
14	Derivatives misc (rational functions)			
15	Exponential functions & their derivatives			
16	Logarithms basics			
17	Derivatives of logs			
18	Derivatives misc (exp & logs)			
19	Increasing & Decreasing (polynomials)			
20	Increasing & Decreasing (harder)			
21	Concavity			
22	Second derivative test			
23	Curve sketching for polynomials			
24	Absolute extrema			

The Antiderivative				
25	The indefinite integral			
26	Initial value problems			
27	Substitution			
28	Estimating areas with rectangles			
29	Trapezoid & Simpson's rule			
30	Total Change in word problems			
31	Fundamental Theorem of Calculus			

(Old #24 has been removed)

Rules for mastery

- Any checkmarks obtained from earlier in the semester receive 3 points for that item.
- Going forward, partial credit may be given for wrong answers. Every topic is now worth 3 points. (No retroactive partial credit)
- Points may be earned on our two remaining exams, which are March 26 (last day of class), and May 7 (final exam).
- Points may also be earned **by appointment** in the professor's office:
 - Students may attempt 2 questions per week until the final exam.
 - You may attempt ones which have not yet appeared on any regular exam.
 - Tell me ahead of time which questions you want to attempt, and I will create questions just for you.
 - No reviewing or help from the professor on that same day.
- Professor's general availability:
 - Monday 9-3
 - Tuesday 8-11
 - Wednesday 9-11 and 12-3
 - Thursday 9-3
 - Friday 9-11