

Math 120: Midterm 1 Review

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The midterm on September 30 covers Sections 2.1-2.3, 2.5-2.8, 3.1-3.4. Below is a list of some practice problems for the topics on the midterm.

- Concept of a limit: Sec. 2.2, problems 4-18, 31-40 (infinite limits), AND Sec. 2.3, problems 11-32
- Limits as $x \rightarrow \infty$: Sec. 2.6, problems 5-10, 15-42
- Continuity and Substitution Law for limits: Sec. 2.5, problems 11-32, 35-43
- Concept of a derivative, rate of change: Sec 2.7, problems 10-16, 18 AND Sec. 2.8, problems 3-11, 32-34, 49-54
- Derivatives of polynomials: Sec. 3.1, problems 3-18, 20-26, 41-42, 47, 49-50
- Derivatives of exponentials: Sec. 3.1, problems 29, 31, 32, 34, 48 AND Sec. 3.4, problem 51
- Product/quotient Rules: Sec. 3.2, problems 3-34
- Trig Derivatives: Sec. 3.3, problems 1-32
- Chain Rule: Sec. 3.4, problems 1-54, 59-69

For general review:

- Chapter 2 Review (page 165)
 - Concept Check: 1-16
 - True/False Quiz: 1-18, 21-26
 - Exercises: 1-24, 29-40, 42-52
- Chapter 3 Review (page 266)
 - Concept Check: 1, 2(a, b, c, f, g, h, i, j, k), 3
 - True/False Quiz: 1-9, 11-15
 - Exercises: 1-5, 7, 11, 13, 16, 18-20, 22-24, 26, 28, 30, 32, 34-37, 39, 41, 42, 49, 50-52, 54, 56-59, 62-65, 67, 69-76, 79-81