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 \( x \to \infty \):** 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