Review For Test 2

For each section below review class examples, homework and quizzes. Use examples in the book to supplement class notes.

1. **Section 12.1**. Vector-valued functions. Sketching of parametrized curves. Parametrizing cures. Review problems: 19, 23, 25, 27, 31, 33, 35, 51, 53, 55, 61 on pp. 821-822.

2. **Section 12.2**. Differentiation and integration of vector-valued functions. Review problems: 5, 7, 9, 19, 27, 33, 35, 43, 57 on pp. 830-831.

3. **Section 12.3**. Velocity and acceleration. Review problems: 11, 15, 17, 23, 25, 27 on pp. 838-839.

4. **Section 12.4.** Tangent vector and tangent line. Review problems: 7, 9, 11 on p. 848.

5. **Section 12.5.** Arc length of a curve. Review problems: 3, 9, 11, 14 on p. 860.

6. **Section 13.1.** Domain and range of functions of several variables. Graphs of functions. Level curves. Review problems: 5, 25, 29, 37, 51, 53, 55 on pp. 876-877.

7. **Section 13.2.** Limits and continuity of functions of several variables. Review problems: 15, 17, 25, 27, 37, 39, 43, 45, 53, 71, 73 on pp. 887-889.

8. **Section 13.3**. Partial derivatives. Review problems: 19, 21, 33, 35, 39, 40, 41, 43, 49, 51, 53, 63, 79, 89 on pp. 896-897.

9. **Section 13.5**. Chain rule and implicit differentiation. Review problems: 7, 9, 15, 19, 21, 23, 27, 31, 33 on pp. 913-914.

10. **Section 13.6**. Directional derivatives and gradients. Review problems: 3, 7, 11, 17, 21, 25, 31, 33, 35, 51, 53, 65 on pp. 924-926.

Good luck!