Information for Math 226 Midterm 1

Friday, Oct. 13, in class.
Closed book: no books, notes or calculators.
Review Sessions: Wednesday, 4:00 and Thursday, 5:00, LSK 460
Office Hours: Wednesday, 1:30-3:00, Thursday, 11:30 - 1:00

Preparation: review homework problems and solutions, review sample midterm (posted on website), review your lecture notes, my lecture notes (posted on website) and textbook. Solutions to sample midterm will be posted later.

Topics: sections 10.1 - 10.4 and 12.1 - 12.5 + statement (not proof) of Theorem 5, p. 715

Suggested problems on chain rule: section 12.5: 1, 3, 4, 12, 15, 17

You should know the following:

1. Vector addition and scalar multiplication
2. Dot products and cross products
3. Equations of lines and planes
4. Balls, Spheres and Boundary of a set
5. Domain, range, graph and level sets of a function
6. Limits and Continuity
7. Partial Derivatives (first order and higher order)
8. Tangent plane and normal line of a surface at a point
9. Chain Rule

The following topics will NOT be covered on the midterm:
- $\epsilon - \delta$ definition and proofs (will not be on midterm but will be on final exam)
- Physical Applications of cross-products
- Hanging cables and chains
- Maple graphics