

Quiz 4 - June 18th in Tutorial

Quiz 2 will cover Sections 2.5 (all), 2.6 (up to and including corollary 2.46 and starting again with multi-index notation on page 82, skipping the parts in between) and 2.7 (all).

The format of this quiz is the standard one for this course: A Definition, an Application and a Proof. It will be written in the last 15 minutes of tutorial.

Definitions and Statements of Theorems: k -th order Taylor Polynomial and Taylor Remainder, and all named theorems below.

Examples and Applications: 2.5 examples 1,2,3 and exercises 1, 2, 5. 2.6 examples 1,2,5 and exercises 1 and 3. 2.7 examples 1,2 and exercises 1,2.

Proofs: 2.45 (partial derivatives commute), Multinomial Theorem, Taylor's Theorem with Lagrange's Remainder, Lemma 2.62, 2.68 (Taylor's theorem in several variables), Lemma 2.76, 2.77 (Uniqueness of Taylor Polynomial).