

Today

1. Exam Review

Review for Exam II

1. Logistics:
 - (a) Start 5 minutes early, go 5 minutes late.
 - (b) Python available if you've passed the gateway quiz.
 - (c) Tell me when and how you use Python (I don't need the actual commands)
 - (d) You may use CalcPlot for graphing (no gateway needed).
 - (e) No need to simplify answers
 - (f) Graphing calculators okay, but no cell phones.
2. Functions of 2 or more variables
 - (a) Graphs, level curves
 - (b) Limits and continuity
3. Partial derivatives
 - (a) Meaning/interpretation
 - (b) Computation
 - (c) Clairaut's Theorem
4. [Tangent planes](#)
5. [Linearization](#)
6. [Differentials](#)
7. The Chain Rule
 - (a) Implicit Differentiation
8. Directional Derivatives
9. Gradient

- (a) Gives direction of greatest increase
- (b) Its magnitude is the maximum slope
- (c) It is orthogonal to level curves (2D) or level surfaces (3D)

- 10. **Local Extrema (this exam)**, including word problems
- 11. Global Extrema (on final – not on this exam)
- 12. Lagrange Multipliers (even though global)

Next Time

- 1. Exam
- 2. Watch 15.1 for after exam [\sim 55 minutes]

Temporary page!

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