Worksheet 23

TITLE Review for Exam 2
CURRENT READING McCallum, Section 14.6-14.8, Chapter 15, Chapter 16 (Not 16.6)
HW #8 (DUE Wednesday 11/4/14 5PM)
McCallum, Section 16.3: 2, 5, 6, 28, 39, 40, 41, 42, 54*,55*.
McCallum, Chapter 16.4: 3, 7, 8,17, 20, 22.
McCallum, Chapter 16.5: 12, 13, 14, 15, 21, 22, 23, 63*, 73.
McCallum, Chapter 16 Review: 1, 4, 10, 11, 12, 14, 20, 23, 55*, 56*.
SUMMARY
This worksheet reviews the concepts that you need to be responsible for on Exam #2.
* means Exam 2 will not cover this material

Worksheet 11 The Chain Rule
Worksheet 12 Second-Order Partial Derivatives
Worksheet 13 Review for Exam 1*
Worksheet 14 Differentiability of a Multivariable Function
Worksheet 15 Local Extrema of a Multivariable Function
Worksheet 16 (Unconstrained) Optimization of a Multivariable Function
Worksheet 17 Multivariable Constrained Optimization (Using Lagrange Multipliers)
Worksheet 18 (Integration of a Multivariable Function
Worksheet 19 Iterated Integration
Worksheet 20 Triple Integrals
Worksheet 21 Evaluating Multiple Integrals Using Other Coordinate Systems
Worksheet 22 The Calculus of Curves In Space*

Here are the in-class activities covered
Surface Activity 4 The Water Table (Constrained Multivariable Optimization)
Here are the titles of the Quizzes we have done so far in the class

**Quiz 5**  Extreme Values of Surfaces  
**Quiz 6**  Constrained Multivariable Optimization  
**Quiz 7**  Iterated Integration  
**BONUS 3**  Multivariable Optimization Using Lagrange Multipliers  
**Quiz 8**  Triple Integrals

Here are the Chapters we have covered in the textbook, *Calculus: Multivariable (6th Edition)*, so far  
* means Exam 2 will not cover this material

**Section 14.6**  The Chain Rule  
**Section 14.7**  Second-Order Partial Derivatives  
**Section 14.8**  Differentiability  
**Section 15.1**  Critical Points  
**Section 15.2**  Optimization  
**Section 15.3**  Constrained Optimization: Lagrange multipliers  
**Section 16.1**  Definite Integral Of A Function of Two Variables  
**Section 16.2**  Iterated Integrals  
**Section 16.3**  Triple Integrals  
**Section 16.4**  Double Integrals in Polar Coordinates  
**Section 16.5**  Integrals in Cylindrical or Spherical Coordinates  
**Section 17.1**  Parametrized Curves*  
**Section 17.1**  Motion, Velocity and Acceleration*

**Group Work**  
What topic(s) are the most unclear right now?

Which topic(s) do you have the most confidence in answering questions on?