

Math 241, Problem Set #6
(due **in class** Fri., 10/18/13)

Stewart, section 11.2, problems 6, 10, 14, 16, 30.

Stewart, section 11.3, problems 2, 4, 20, 44 (parts (a) and (b)), 70. For problem 70, do not use the methods of section 11.5. (Hint: For problem 20, do not attempt to perform the integration!)

Stewart, section 11.4, problems 6, 12, 22, 34, 36.

Stewart, section 11.5, problems 32, 36, 47.

Also:

- A. Suppose $f(x, y)$ and $g(x, y)$ are differentiable at (a, b) . Must the function $h(x, y) = f(x, y) + g(x, y)$ be differentiable at (a, b) ? Your solution should make explicit use of the definition of differentiability of multivariate functions, as well as all relevant properties of partial derivatives, limits, etc.