Physics 360/Math 360 MWF 11:00 - 11:50 PM, Room: CST 225

Instructor: Michael Lerner, CST 213, Phone: 765-983-1784

Assignment 8, Due Monday April 10th

1 It's all Multivariable Calculus this time

1.1 Conceptual Understanding

In the style of Fenyman, and including pictures, write out a proof of either the divergence theorem or Stokes' theorem. You're free to spend as much time studying Feynman as you like *before* doing this problem. But, while you're writing it out, you must put away all references. You can re-do the problem until you've completed it fully in a "closed-notes" fashion.

1.2 Green's theorem in the plane

Boas starts out with Green's theorem in the plane. Look at her section. Explain how one can derive that from what we covered in Feynman.

1.3 Divergence and Curl

Write up your solutions for all six parts of the worksheet we did in class.