Homework Assignment for Week 13

Assigned May 21, 2009.

1. Section 15.1: Problems 9, 15, 17, 20, 25.

2. Read section 15.2, Table 15.2 about various notations of the (scalar) line integral associated with a vector field $\int \boldsymbol{F} \cdot \boldsymbol{T} \, ds$.

3. Section 15.2: Problems 5, 11, 17, 19, 21, 33 ('Work', 'Flow', 'Circulation' are alternative names for the integral $\int \boldsymbol{F} \cdot \boldsymbol{T} \, ds$, see Definition at p939 and p941. Also read Definition at p942 and then p943-944 for the definition and formula for 'flux').

4. Section 15.3: Problems 1, 3, 13, 19, 20, 23, 24, 30.