PHY 410
HW# 10
Assigned: April 5: April 12, 2010

10.1 Problem # 7.1 of the Text
10.2 Problem # 7.2 of the Text
10.3 Problem # 7.3 of the Text
10.4 Problem # 7.5 of the Text
10.5 For the Fermi gas in two dimensions (see Problem 7.1 above) calculate the chemical potential μ as a function of N/A *and* τ exactly. Discuss the low $\tau << \varepsilon_F$ and high $\tau >> \varepsilon_F$ temperature behavior of μ.