PHY 711 – Assignment #19

10/7/2015

Continue reading Chapter 7 in Fetter and Walecka.

1. Use the Laplace transform method to solve the following differential equation for $\phi(x)$ with initial conditions $\phi(0) = 0$ and $d\phi(0)/dx = 0$.

$$\left(-\frac{d^2}{dx^2} - 4\right)\phi(x) = F_0,$$

where F_0 is a given constant.