

ASSIGNMENT # 1

DUE: Tuesday, January 16

READ: Chapter 2 (finish reading chapter) - Griffiths
PROBLEMS : 2.23 ; 2.24 ; 2.29 ; 2.34

Hints/solutions:

2.23: Easy, using the definition of the delta function.

2.24: For both parts, try using the fundamental property of the integral of an ordinary function $f(x)$, multiplied by the delta function we want to study. In part b, it is also useful to do an integration by parts.

2.29 Very similar to the case of the even solutions, that we discussed in class.

2.34 a) $R=1$ b) $R = \frac{[\sqrt{E} - \sqrt{E - V_0}]^4}{V_0^2}$