

Physics 220 Assignment 7
Due Friday 3/27/09

1. TZD 7.54
2. TZD 7.55; **also**, how does the probability of escaping in a day compare if the barrier height is $U_0 - E = 4 \text{ MeV}$?
3. TZD 7.61 (in this case make a nice plot using Mathematica or some other software with the axes labeled, etc.)
4. TZD 8.4 (hint: write $\mathbf{k} \cdot \mathbf{r}$ in Cartesian coordinates as $k_x x + k_y y + k_z z$; “show that the function is a solution” means plug it in and show that it satisfies the equation.
5. TZD 8.9
6. TZD 8.11
7. TZD 8.12 c) only