

Physics 115a
Homework 8
Assigned June 1, 2007

This assignment is not to be handed in and will not be graded. Solutions will be posted, and you should use this homework as a guideline for material that will appear on the Final Exam

8.1) Griffiths problem 3.27 Note that the equations given in this problem could just as well be given in Dirac notation which may fit better with my lectures:

$$|\psi_1\rangle = \frac{3|\phi_1\rangle + 4|\phi_2\rangle}{5} \quad (1.1)$$

and

$$|\psi_2\rangle = \frac{4|\phi_1\rangle - 3|\phi_2\rangle}{5} \quad (1.2)$$

Hint: It will be helpful to read sections 13.1 and 13.2 of the lecture notes for this homework. I may not get to this in class, but I would like you to read and understand this material, and ask me question about it as needed.