

Chem 442: Homework for lecture L18

(only turn in **BOLD** assignment first lecture next week of classes; do all assignments)

1. Turn in Show that if $|a\rangle$ and $|b\rangle$ are orthogonal and normalized (this is called “orthonormal” for short), then

$$\frac{1}{\sqrt{2}}(|a_1\rangle|b_2\rangle - |a_2\rangle|b_1\rangle)$$

is normalized.

2. Worked Problem 7.1 (page 119). Try doing it without looking at the solution!
3. Problem 7.1 (page 134)
4. Problem 7.3 (page 134)