PHYS 632: Quantum Mechanics II (Winter 2021)
Exercises 11 January 2021 (Monday, Week 2)
Due Monday, 18 January 2021

Exercise 1. If we define the vector $\mathbf{J} := \hat{x}J_x + \hat{y}J_y + \hat{z}J_z$, where $\hat{x}$, $\hat{y}$, and $\hat{z}$ are the usual unit vectors, compute $\mathbf{J} \times \mathbf{J}$.

Try to do this calculation *efficiently*; that is, without redundant calculations.