Section 12.3: Additional Problems

1. If $\mathbf{a} = \langle 6, 0, -2 \rangle$, find a vector $\mathbf{b}$ such that $\text{comp}_{\mathbf{a}}\mathbf{b} = 3$
2. Find a vector of length 5 that has the following directional angles: $\alpha = \frac{\pi}{3}$, $\beta = \frac{\pi}{6}$, and $\gamma = \frac{\pi}{2}$,