MTH 265, Quiz #1, Summer 2021   Name _____

Instructions: Show all work. Use *exact* answers unless specifically asked to round. You may check your answers in the calculator, but you must show work to receive credit.

1. Find the vector connecting the points $A(-1,0,2)$ and $B(3,1,-1)$. Then find the magnitude of the vector.

2. Find the angle between the vectors $\langle 1,1,1 \rangle$ and $\langle 3,-1,2 \rangle$.

3. Find $\vec{u} \times \vec{v}$ if $\vec{u} = \langle 1,-1,3 \rangle$ and $\vec{v} = \langle 2,1,4 \rangle$.

4. Draw the vector connecting the origin and the point $(4,-1,5)$ in three dimensions. Label your axes using the right-hand rule.