

Unit-1

QB

1. Write the expression for the inner product of two ket vectors
2. If $|u\rangle$ and $|v\rangle$ are orthogonal unit vectors, what is $\langle u+v|u-v\rangle$?
3. What is the norm of a state vector $|\psi\rangle$?
4. If $|v\rangle$ is normalized, what is $P|v\rangle$ for $P = |v\rangle\langle v|$?