

Answer on question #52311, Physics, Quantum Mechanics

Question Which of the following is NOT correct?

$$\vec{k} \cdot \vec{k} = 1$$

$$\vec{i} \times \vec{j} = \vec{k}$$

$$\vec{i} \times \vec{k} = -\vec{j}$$

$$\vec{j} \cdot \vec{j} = 0$$

Solution $\vec{j} \cdot \vec{j} = 0$ is not correct.

It should be $\vec{j} \cdot \vec{j} = |\vec{j}|^2 = 1$ as it is unit vector.