

Math 4133 - Linear Algebra

Quiz #12 - 2013.02.13

Solutions

1. What properties of the vectors \vec{u} and \vec{v} affect the magnitude of $\vec{u} \times \vec{v}$?

Clearly the magnitudes of \vec{u} and \vec{v} affect the magnitude of $\vec{u} \times \vec{v}$, but also, the angle between \vec{u} and \vec{v} also affects the magnitude of the resulting cross product.

2. Given \vec{u} and \vec{v} , what restrictions are required to compute $\vec{u} \times \vec{v}$?

The two vectors \vec{u} and \vec{v} must have three components (or be elements of \mathbb{R}^3).