Question 22

If the cross product of two vectors vanishes, what can you say about their directions?

Solution

If $\vec{\mathbf{A}} \times \vec{\mathbf{B}} = \vec{\mathbf{0}}$, then $\vec{\mathbf{A}}$ and $\vec{\mathbf{B}}$ are either parallel (pointing in the same direction) or antiparallel (pointing in opposite directions).