

Physics 1214 - General Physics II

Quiz #9 - 2013.02.08

Solutions

1. Given a uniform magnetic field \vec{B} and a closed loop carrying a current I , what orientation is required between them to ensure that torque τ is zero?

The field \vec{B} must be perpendicular to the plane of the loop.

2. What must always be perpendicular to a segment of conductor carrying a current and a magnetic field.

The magnetic force is perpendicular to both the conductor and the field.