QUIZ6 10 MIN **ROOM: EM1304** **https://socrative.com**

Enter your SMU ID [Not Name]

1. The force of a moving charge in a magnetic field is $\vec{F}_B = q\vec{v}\times\vec{B}$. This force is

A. Perpendicular to $\vec{v}$ but not $\vec{B}$

B. Perpendicular to $\vec{B}$ but not $\vec{v}$

C. Perpendicular to $\vec{v}$ and $\vec{B}$

D. None of the above

2. A long straight wire carriers 10 A. The magnetic field 1 cm from the wire is

A. 2 G B. 3 G

C. 0.5 G D. 10 G

3. A toroid with a center radius of 10 cm has 1000 turns of wire that carries 5 A. The field at this location is

A. 100 G B. 200 G

C. 0.01 G D. 50 G

4. Two straight wires are parallel to each other. Each carries 10 A current, flowing in opposite direction. The force between the two wires is

A. attractive

B. repelling

C. zero, i.e., no force between the wires

D. 100 N