Ch 21 HW Quiz #1A

A proton is initially at rest and then accelerated through a 3200 Volt potential difference. The proton then travels in the +y direction into a region of uniform magnetic field of 7.8 Tesla directed into the page.

a) Determine the magnitude and direction of the magnetic force that will act on the proton due to the uniform field.
b) What is the magnitude and direction of the uniform electric field needed in this region in order to allow the proton to continue to travel in the +y direction at a constant velocity?