1. A magnetic field of 0.3 T is directed perpendicular to the plane of a circular loop of wire of radius 25 cm. Find the magnetic flux through the area enclosed by this loop.
   □ $2.3 \times 10^{-2}$ T
   □ $7.1 \times 10^{-3}$ T·m²
   □ $4.8 \times 10^{-1}$ T·m²
   □ $5.9 \times 10^{-2}$ T·m²

2. A magnet and a non-magnet of the same mass are dropped into copper tubes of equal length. Which takes longer to come out?
   □ The magnet.
   □ The non-magnet.
   □ It takes the same amount of time.

3. A flat metal plate swings at the end of a bar as a pendulum, as shown. When the pendulum is at position a, what are the directions of the induced currents and (magnetic) force on the bar, respectively?
   □ Counterclockwise; to the left
   □ Clockwise; to the left
   □ Counterclockwise; to the right
   □ Clockwise; to the right

4. Which pendulum experiences the largest (magnetic) force?
   □ a
   □ b
   □ c
   □ they all experience the same force

5. A conducting bar slides on two fixed conducting rails with a constant magnetic field pointing into the page. What are the directions of the induced current and the force on the bar, respectively?
   □ Counterclockwise; to the left
   □ Clockwise; to the left
   □ Counterclockwise; to the right
   □ Clockwise; to the right