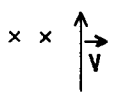
Department of Natural Sciences
Clayton College & State University

February 21, 2002

Physics 1112 – Quiz 5b

Name SOLUTION

1. Assume that a uniform magnetic field is directed into this page. An electron is released with an initial velocity directed from the bottom edge to the top edge of the page. Which of the following describes the direction of the magnetic force acting on the electron?



a. Out of the page.

(b.) To the right.

c. To the left.

d. Into the page.

2. The direction of the magnetic field at some given location is:

a. The direction in which the south pole of a compass needle points in that location.

(b.) The direction in which the north pole of a compass needle points in that location.

c. The direction perpendicular to a compass needle.

d. Cannot be determined by a compass needle.

3. A charge can move through a magnetic field and not experience a magnetic force by:

a. Moving quickly.

b. Traveling parallel to the magnetic field.

c. Moving perpendicular to the magnetic field.

d. None of these.