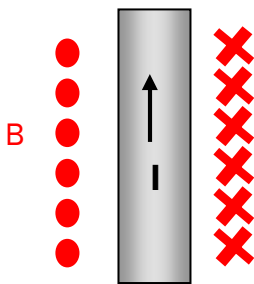


### Hand Rules

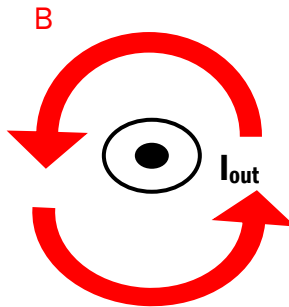
**Directions:** Read online textbook page 770 and 774. In the following situations, find either the direction of the magnetic field, the direction of the current or the direction of the force using the hand rules.

1. Find the direction of the magnetic field

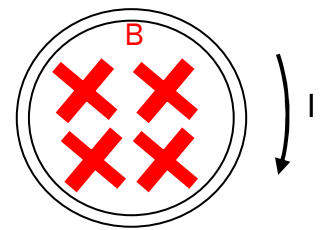
(a) Current is moving up the wire



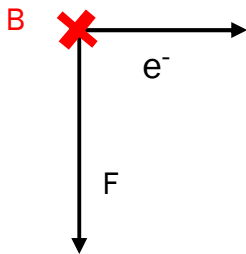
(b) Current is coming out of the page



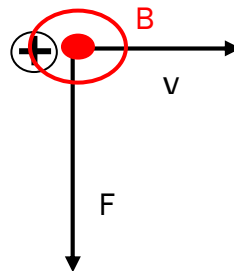
(c) Current is moving clockwise through the loop



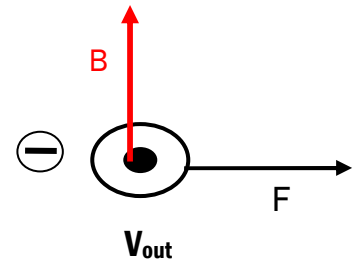
(d) Electron flow is directed to the right



(e) A positive charge is moving to the right

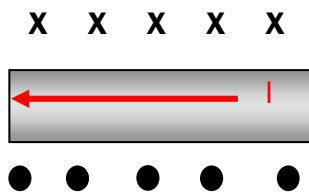


(f) A negative charge is moving out of the page

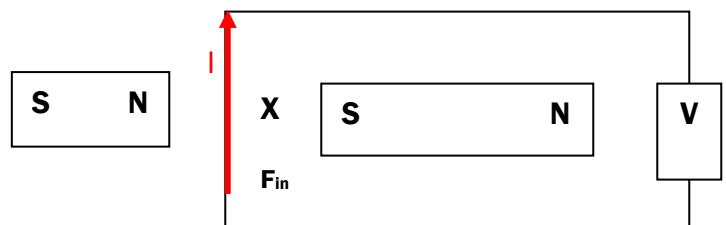


2. Find the direction of the current

(a) The magnetic field is represented by the X's and O's

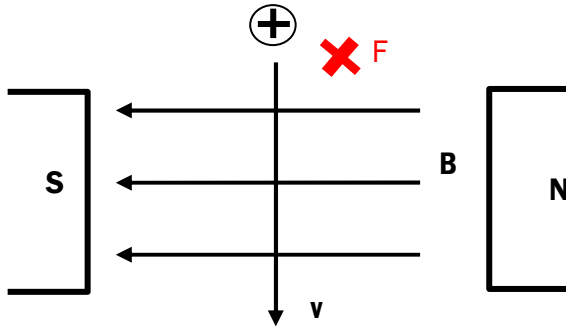


(b) The force is directed into the page at point X

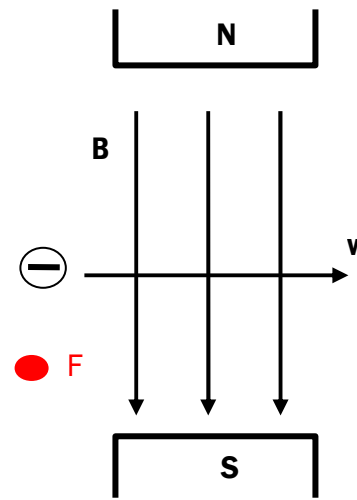


3. Find the direction of the force

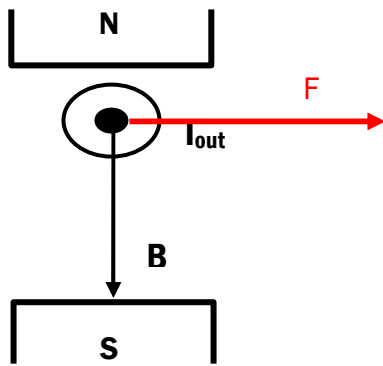
(a) A positive charge is moving down the page



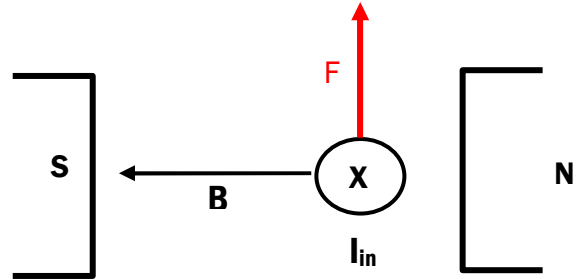
(b) A negative charge is moving to the right



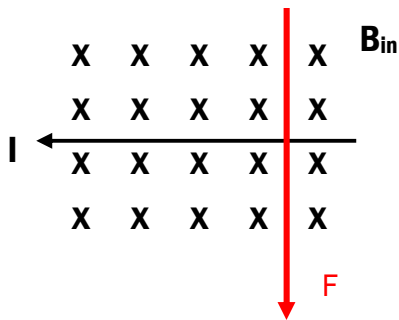
(c) Current is moving out of the page



(d) Current is moving into the page



(e) Current is moving to the left



(f) A negative charge is moving up

