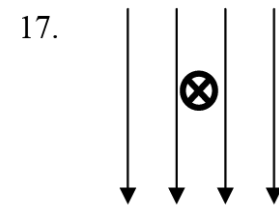
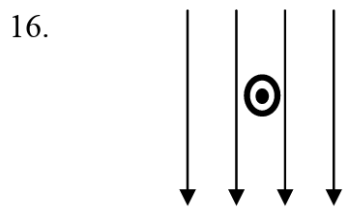
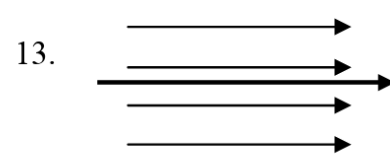
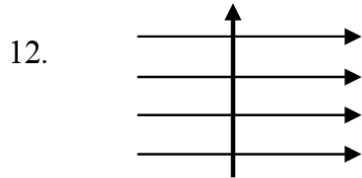
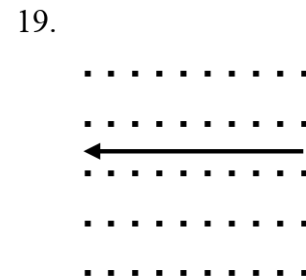
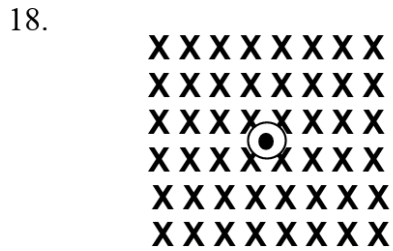
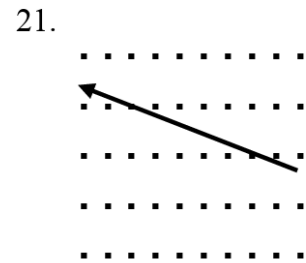
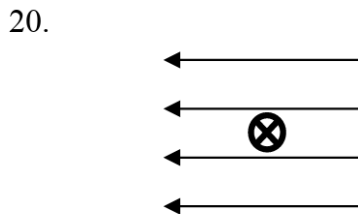


Indicate the direction of the force on the current carrying wire in 12-21 below: Draw a vector on the diagram indicating the direction of the force also indicate the direction in the blank provided below each diagram. Use +x (right) or -x (left), +y (toward the top of the page) or -y (toward the bottom of the page), +z (out of the page) or -z (into the page),.



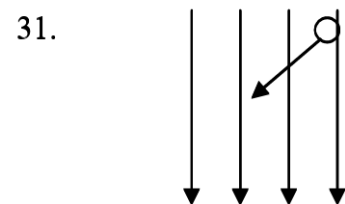
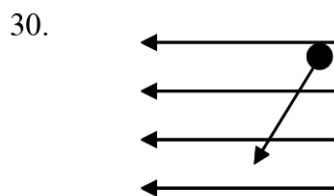
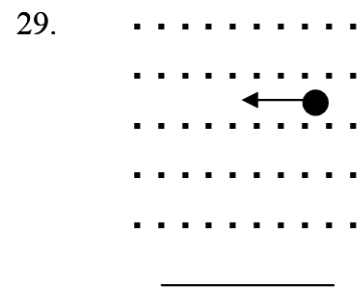
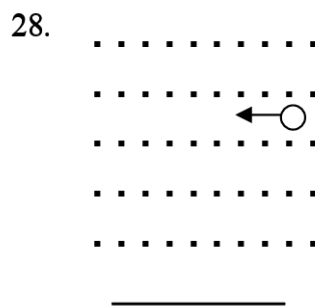
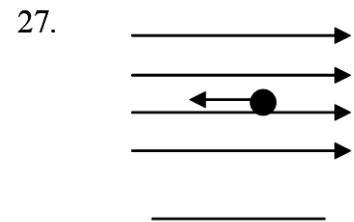
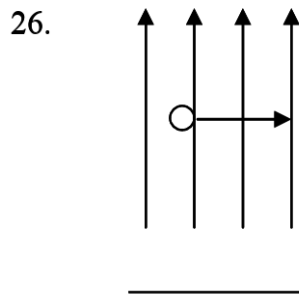
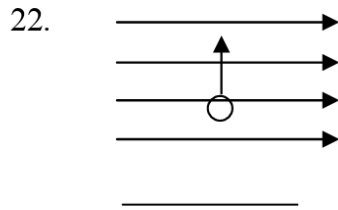




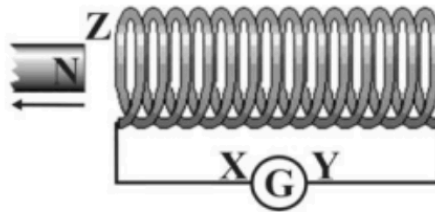
Questions 22–31: Use the line under each figure to specify the direction of the force and the resultant path on the charges moving in these magnetic fields:

This symbol represents a + charge ○

This symbol represents a – charge ●



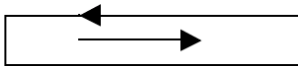
The diagram shows a magnet leaving a coil. The coil is connected to a galvanometer.



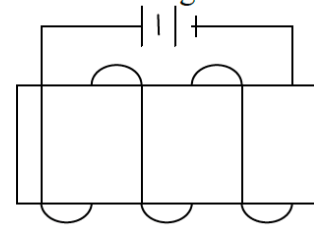
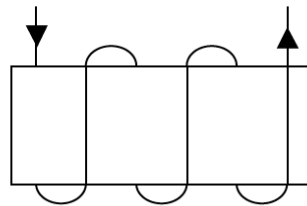
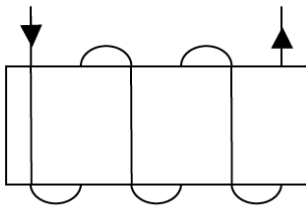
Which one of the following correctly describes the polarity of the coil at **Z** and the direction of the induced (conventional) current through the galvanometer?

	Polarity at Z	Direction of induced (conventional) current through galvanometer
A	North	X to Y
B	North	Y to X
C	South	X to Y
D	South	Y to X

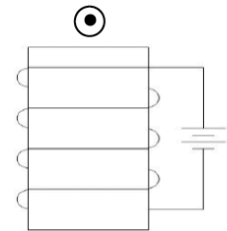
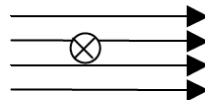
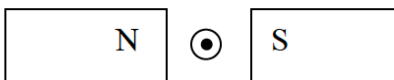
1. Determine the direction of the magnetic field for each of the following 4 wires.



2. Determine the orientation of the magnetic field for each of the following 3 coils.



3. Determine the direction of the force on the wire for the following 3 cases.



5. Determine the direction of the induced current – using Lenz’s law - for the following 4 cases

