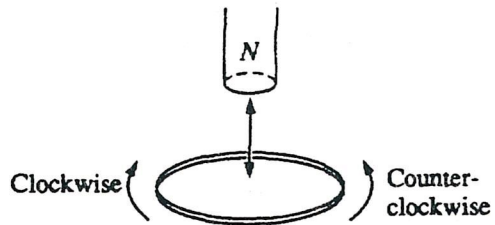


65. Two long parallel wires are a distance $2a$ apart, as shown above. Point P is in the plane of the wires and a distance a from wire X . When there is a current I in wire X and no current in wire Y , the magnitude of the magnetic field at P is B_0 . When there are equal currents I in the same direction in both wires, the magnitude of the magnetic field at P is

- (A) $\frac{2}{3} B_0$
 (B) B_0
 (C) $\frac{10}{9} B_0$
 (D) $\frac{4}{3} B_0$
 (E) $2 B_0$



66. In the figure above, the north pole of the magnet is first moved down toward the loop of wire, then withdrawn upward. As viewed from above, the induced current in the loop is
- (A) always clockwise with increasing magnitude
 (B) always clockwise with decreasing magnitude
 (C) always counterclockwise with increasing magnitude
 (D) always counterclockwise with decreasing magnitude
 (E) first counterclockwise, then clockwise
67. A variable resistor is connected across a constant voltage source. Which of the following graphs represents the power P dissipated by the resistor as a function of its resistance R ?

