

# Practice Problems



Find magnitude and direction of  $B$  at Point  $A$ . The radius is  $D/2$ .



Find  $B$  at Point  $A$ , after wire loop is straightened but still has same current  $I$ .

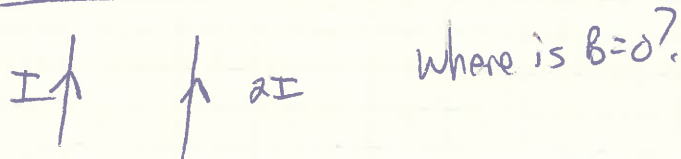
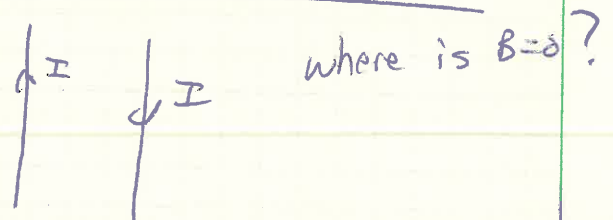
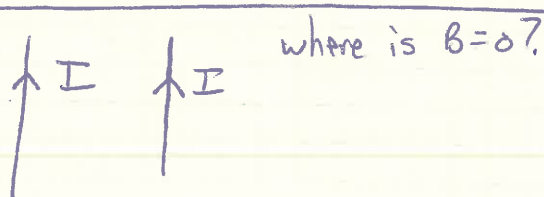
c) Compare the  $B$  field strength for cases a) & b)

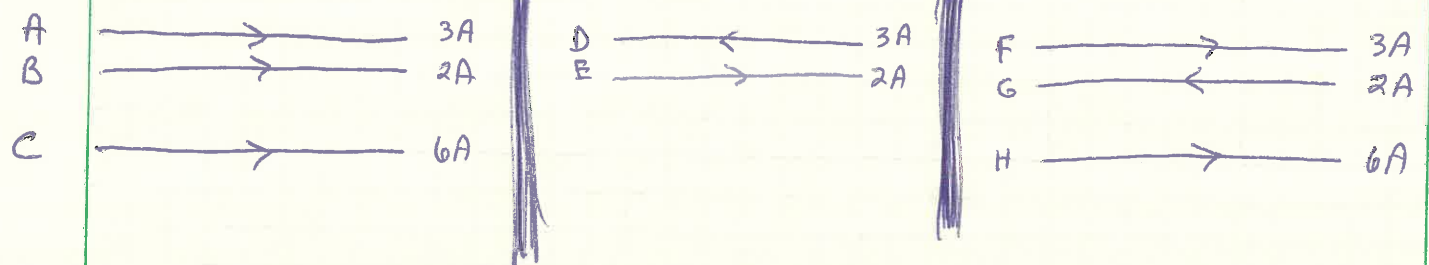
$q_1 \bullet \rightarrow v_1$   
 $\leftarrow \bullet q_2 = -2q_1$   
 $v_2 = 2v_1$

a) How many forces on  $\#1$ ?

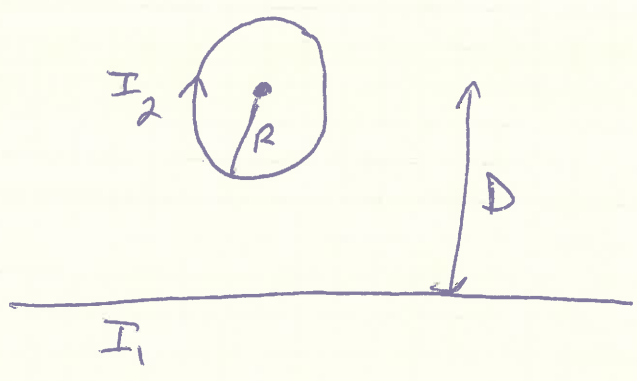
b)  $B$  direction at  $\#1$ ?

c)  $F_B$  on  $\#1$ ?





Rank the strength of the total B force on each wire.



What is magnitude and direction of  $I_1$  if B at center of loop is zero?