

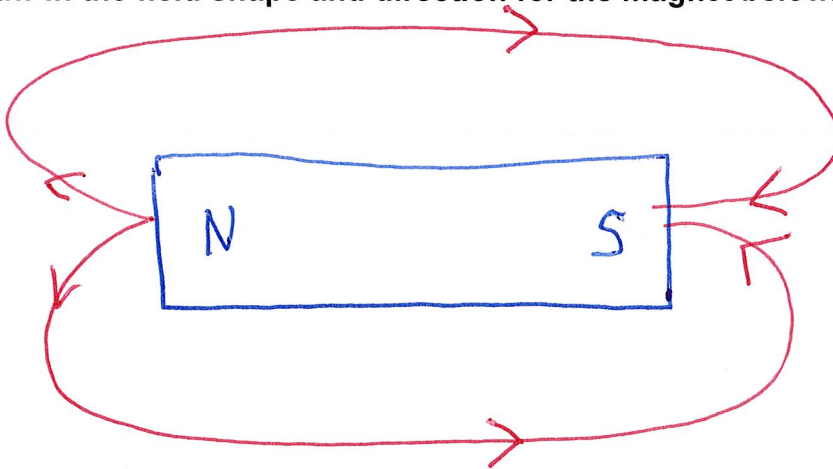
Physics 12 RHR Worksheet

For conductors + motors.

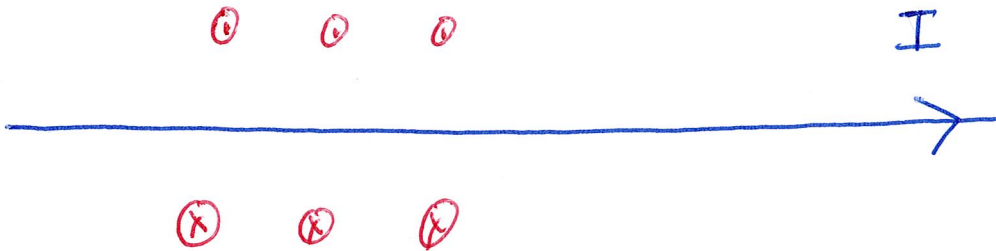
Name: \_\_\_\_\_

KEY

1. Draw in the field shape and direction for the magnet below.

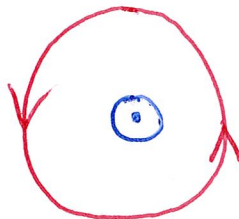


2. Draw in the field shape for the wire below

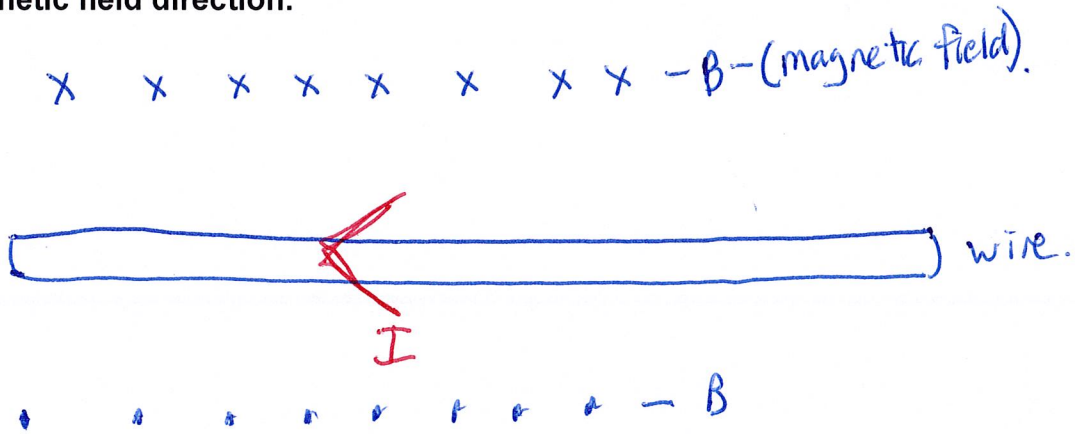


3. Draw in the field shape for the wire below

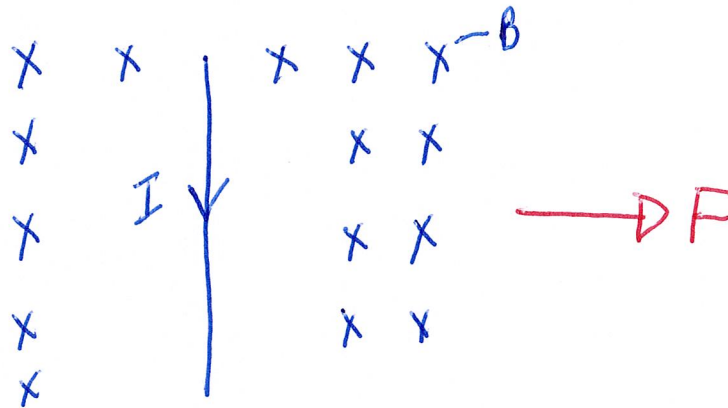
- remember the  $\bullet$  represent out



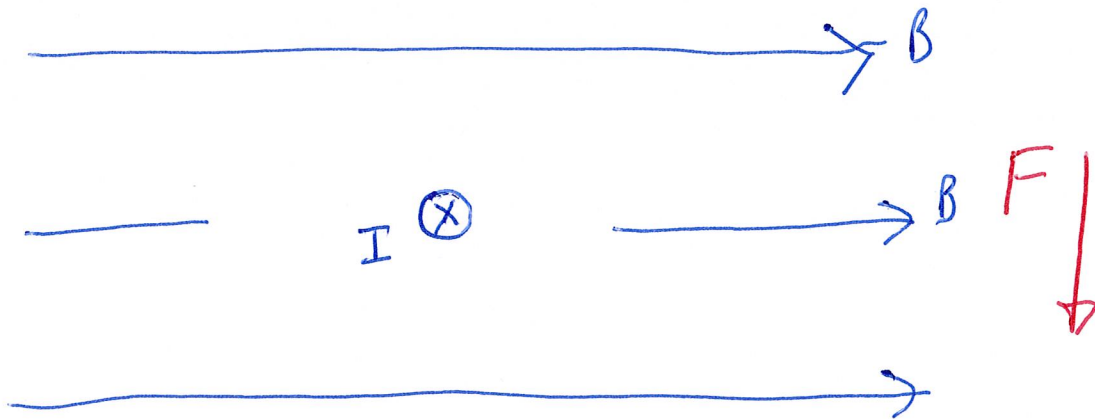
4. Draw in the current direction for the wire below, based on the indicated magnetic field direction.



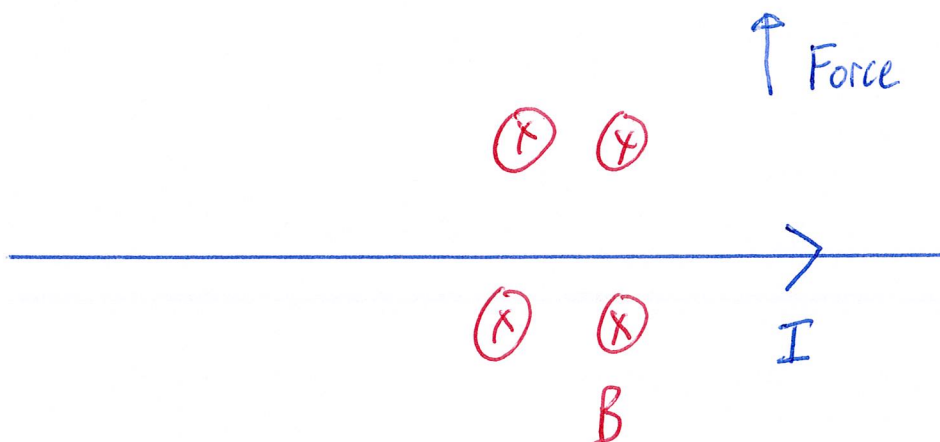
5. What direction is the force on the wire below?



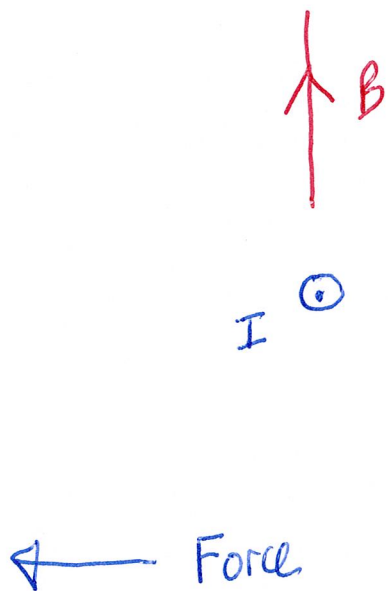
6. What is the direction of force on the wire below?



7. Draw in the required B field below

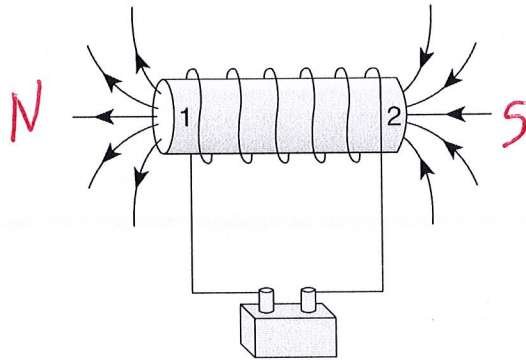


8. Draw in the required B field below.



## 9. Field Shapes off bar magnets and solenoids

Identify the magnetic poles 1 and 2 of the current-carrying solenoid in the diagram below.



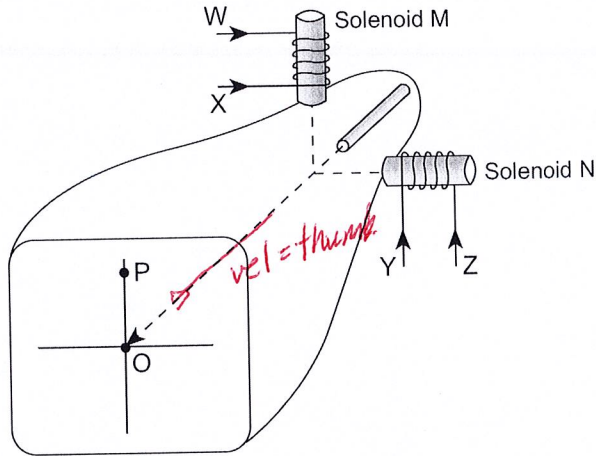
	POLE 1	POLE 2
A.	<del>North</del>	<del>North</del>
<b>B.</b>	North	South
C.	South	North
D.	<del>South</del>	<del>South</del>



12. RHR

**HARD**

When there is no current in the solenoids, the electron beam in the cathode ray tube strikes the screen at the origin O.



- electron are moving  
 - you want  $\oplus$  pushed down, which would push  $\ominus$  up.  
 - need  $B \leftarrow$

In order to move the beam to position P, which solenoid is used and what is the direction of the current applied?

	SOLENOID	CURRENT DIRECTION
A.	M	W
B.	M	X
<b>C.</b>	N	Y
D.	N	Z

- to get  $B \leftarrow$   
 use solenoid N

- to get  $B \leftarrow$ ,  
 you need current direction Y.