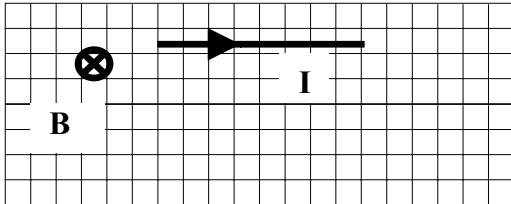
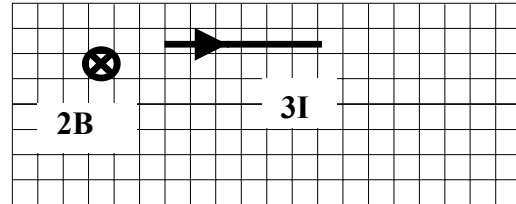


# Magnetic Force

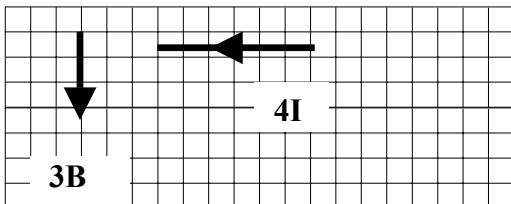
A current-carrying wire is shown in each region; the length of the wire can be determined from the grid squares. A uniform magnitude field is present in each region, with its magnitude and direction indicated. The direction and magnitude of the force on the wire is shown for two cases. Write in the direction and magnitude of the force for all of the other cases.



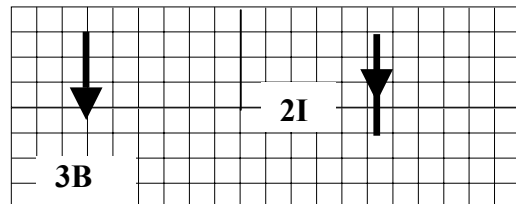
Direction of force:  $\uparrow$   
 Magnitude of force:  $F$



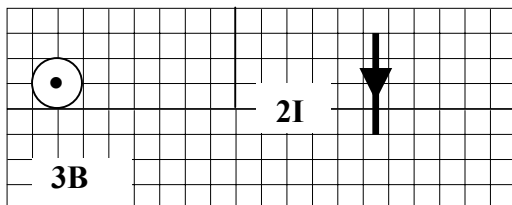
Direction of force:  $\uparrow$   
 Magnitude of force:  $4.5 F$



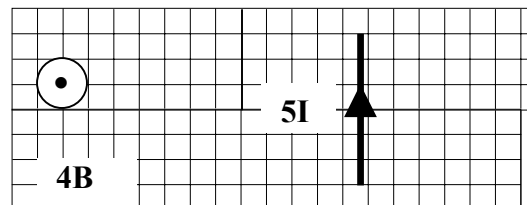
Direction of force:  
 Magnitude of force:



Direction of force:  
 Magnitude of force:



Direction of force:  
 Magnitude of force:



Direction of force:  
 Magnitude of force: