Prelab: Magnetic Force on a Charge Carrying Wire

Instructions: Prepare for this lab activity by answering the questions below. Note that this is a PreLab. It must be turned in at the start of the lab period. Time cannot be given in lab to perform PreLab activities. After the start of lab activities, PreLabs cannot be accepted. Explain your answers. Points will be taken off if your work is not neat and well organized.

1. (5 points) How will you verify that the magnetic force $F = ILB\sin(\theta)$ is proportional to each parameter?

2. (5 points) How will you use the balance to measure the magnetic force, $F_B$?

3. (5 points) You lab partner says that it is not necessary to zero the balance before the experiment begins? Is he correct? Explain your answer.