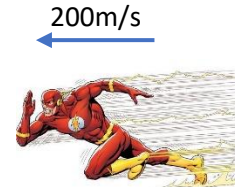


Discussion Week 7 Question 1

When the 88kg Flash runs, he acts like a charged particle carrying a charge of 26kC. Flash is running towards metahuman Magenta who has the power to create magnetic fields about her. When the Flash runs off a ledge with a horizontal velocity of 200m/s to the left, he experiences a net force of 0N in the vertical direction. What is the magnitude and the direction of the magnetic field created by Magenta? In what direction would Magenta need to rotate her magnetic field to repel the Flash away from her?



Discussion Week 7 Question 2

61 kg speedster Jessie Quick runs with a charge of 200C through a 50V/m electric field. A Magnetic field is also present perpendicular to the electric field with a strength of 10 T . At what speed must Jessie Quick run to experience an acceleration of 0m/s^2 ?



Discussion Week 7 Question 3

The devious Reverse-Flash traps 60kg Kid-Flash (who has a charge magnitude of 1.5kC) in a 0.10 T magnetic field causing him to undergo circular motion as pictured in the diagram below. If Kid-Flash experiences a net force of 2000N, what is Kid-Flash's speed, the radius of his motion, frequency of his motion, and the sign of his charge?

