

Exam grades:

80 or above: great job!

50 or above: doing ok

35 or above: could be doing better

21 to 34: signals signs of trouble

Below 20: you might be in trouble

Average:40

Exams will be handed on my door during normal business hours

10 am till 8 pm every day

$$\vec{F}_B = q\vec{v} \times \vec{B}$$

Units of magnetic field: Tesla

1 T = 10000 Gauss

Surface of earth: 0.5×10^{-4} T

Bar magnet: 1.5 T

Strong superconducting magnet: 30 T

Clicker problem 1: A 500-eV electron and a 300-eV electron trapped in a uniform magnetic field move in circular paths in a plane perpendicular to the magnetic field. What is the ratio of the radii of their orbits?

1. 2.8
2. 1.7
3. 1.3
4. 4.0
5. 1.0