

Massachusetts Institute of Technology
Department of Physics

Physics 8.07

Fall 2005

Problem Set #6
Due at 4pm Friday, October 21, 2005

Note: The Midterm Exam is in class Monday, October 24

1. **Griffiths Problem 5.29 (p. 240)**

Evaluate both \vec{A} and \vec{B} both inside and outside the sphere.

2. **Griffiths Problem 5.58 (p. 253)**

For part b), use Griffiths eq. (5.89). For part e), compute the volume average of your interior magnetic field from Problem 1.

3. **Griffiths Problem 5.60 (p. 254)**

4. **Griffiths Problem 6.5 (p. 260)**