

Physics 220
Exam 4
Take home portion

You are strongly encouraged to discuss this material with your classmates but are required to do your own work.

Directions: Use your own words to demonstrate your understanding of the concepts. For each question, describe **in detail** as if you are talking with someone who has not taken this class. All answers must explain “how” and “why” they are true. I will not assume you understood if it’s not explicitly stated. All answers must be grammatically correct and typed, with the exception of any equations or diagrams.

1. Select one problem from Ch10 homework or a problem from week 12 lab or recitation that you did incorrectly. If you received a perfect score on this assignment/lab/recitation, select the problem that gave you the most difficulty.
 - a. Explain what you did wrong and what should be done differently to obtain the correct answer.
 - b. Show your correct solution
 - c. As you describe the problem make sure you address these four items:
 - How would you begin?
 - What step would you take next?
 - How would you know if your strategy is working?
 - Is there an alternative approach?
 - d. Identify the learning goal(s) from the “Exam 4 Learning Goals” that this problem addresses.

2. Complete all the steps described in 1. above for one problem from the Chapter 11 homework.

3. Complete all the steps described in 1. above for one problem from the Chapter 12 homework or week 13 lab or recitation.