

Homework Submission, Physics 105

How to get the homework problems and data:

- The homework problems for this course are on following pages in this packet.
- Problems 2-1 through 2 -5 belong to assignment 2, etc.
- Except for the Vector Tutorial, which is assignment 1, each of you will do the problems using different data, resulting in answers that are different from those of other students. Blanks are left in the problems where you can write your data. Your data for the entire semester is available over the internet and can be printed out.
- To get your individual data, go to our course home page: <http://www.physics.byu.edu/faculty/magleby/physics105.aspx>. Then follow the links to "Online Homework" and then "Homework Data Sheet".
- The homework problems can also be found on the class website, and your personal data can be retrieved through the class webpage anytime during the semester.
- The first homework assignment is a Vector Tutorial. It must be completed by hand and submitted in the homework boxes found opposite room N357 ESC.

Hand Submitted Homework:

- Your homework answers will be submitted by computer for the correct answer and will be graded by hand for presentation.
- Each hand-graded problem is worth 1 point. A sample of a homework solution is included in the packet and is posted in the TA lab. The homework must be neatly presented, labeled with your CID and include:
 - Equation(s)
 - Initial conditions
 - Symbolic solution.
 - Appropriate units
 - Boxed or arrowed answer.
- The homework to be graded by hand is due at 4pm on Tuesdays. This is the day after the computer due date for that homework. *Your homework will not be returned to you, so make a copy if you would like to keep it.*

Computer Submitted Homework:

- Your homework answers will be submitted by computer for the correct answer and will be graded by hand for presentation.
- Each computer graded answer is worth either five points or two points.
 - Example: Homework 2-1 requires two work out type answers: a and b. Each of these answers is worth 5 points, for a total of 10 possible points for Problem 1 from Homework #2.
 - Example: Occasionally you may be asked a homework question that requires a **Boolean** type answer: up/down, yes/no, front/back, left/right, etc. These problems are only worth two points each and can only be submitted once. (If you miss it the first time, there is no question what the correct answer is!)

- You have three tries to get the correct answer on the computer submission portion of your homework, unless it is Boolean (See above). After each submission, the computer will immediately tell you which of the problems were correct and which were wrong. When a wrong answer is submitted, the computer will give you the correct answer and a new data set to try again.
- For the first submission, submit all of the answers for all of the problems, since questions left blank on the first submission will be graded as incorrect.
- Correct answers need not be redone, unless they are part of a multi-part question where one answer is used to calculate the next.
- If a correct solution is entered *within* three tries and *before* the due date, full credit of either five or two points per answer is awarded.
- If the correct solution is entered into the system *after* the due date but *before* the unit closing date, half credit will be awarded.
- Since you have immediate feedback and three chances to get it right without penalty, it is a good idea to allow enough time to resubmit homework if necessary.
- After three tries the system closes that homework assignment for you and no other attempts will be accepted.
- After the cutoff date for that unit the system closes that homework assignment for the whole class and no other attempts will be accepted.
- Please be aware that this homework program has been used for many years, and by thousands of students. All of the grading bugs have been worked out. Therefore, if your answer is wrong, it is almost certainly “user error” and not a computer error.
- On the other hand, there have occasionally been bugs in the timing of the homework submission system. If your homework is marked late, but you submitted before the deadline, please email me ASAP: sam25@physics.byu.edu .
- Please note that the system records both your exact keystrokes and time of submission.

Format details for computer homework submission:

- First work the problems on paper using the data set obtained with your CID number on the class website.
- Next, check to make sure your answers are within the range. The list of ranges can be found at the end of the homework problem under “Answers to Homework Problems”. This list includes not only the ranges you can expect the answers to be in, but also the units that the answer should be given in and the number of significant figures that must be included. Getting an answer within the range doesn’t guarantee that your answer is correct, but finding an answer outside of the range lets you know that it is positively wrong, and you should start over.
- Examples:
 - “40, 800 J means that your answer will lie between 40 and 800 Joules and that the answer must be given to the nearest 1 Joule. If your calculation was done in electron-volts, or kilowatt-hours you must convert to Joules.
 - Example: “15.0, 60.0 N” means that the answer must be given to the nearest 0.1 Newton, and the correct answer is between 15 and 16 Newtons. If the information given was in pounds, you must convert to Newtons.

- In some cases, the accuracy is indicated explicitly. For example, “32000, 39000 ± 100 km” means the answer must be given to the nearest 100 km.
- Do not put units on your answer when you submit it to the computer.
 - Do not put any spaces in the number or any commas.
 - Example: You may have to submit an answer like 120,000 but don’t use commas. The correct form for submission is 120000, unless the range sheet shows that exponential notation is required.
- If a very large or very small value needs to be written in scientific notation, use exponential notation.
 - Example: an answer of 3.00×10^8 would be written 3.00e8, and 1.6×10^{-19} would be written 1.6e-19. The ‘e’ must be lower case, and you should not put any spaces before or after the dash.
 - **Exponential notation causes more formatting frustration than anything else in the homework system.**
- The computer will accept more digits than required. If there is some question about how to best round off an answer, try entering more digits and letting the computer do the rounding for you. **Caution! This trick does not work unless the answer has a decimal in it, and you must enter in more places than required! The computer will not round to the nearest ones, tens, hundreds or thousands—only tenths, hundredths, etc.**

Please be patient:

You can expect some frustration when first learning the computerized homework submission process. The instant feedback makes it all worthwhile.