MA 154, Spring 2007   SAGE, The Online Homework System

Starting with Lesson 1, skipping Lessons 4, 32, 33, and 34, homework will be completed online, using SAGE, the Math Department's online homework system. Complete Lessons 4, 32, 33 and 34 on paper and bring them to class, along with your questions..

The program is easy to use and indicates immediately whether an answer is correct or incorrect. Multiple attempts are allowed, at no penalty, until the correct answer is found. The problems line up with the problems on the assignment sheet one-for-one.

Technical stuff:
o **Web Site**: Go to the Math 154 web page at www.math.purdue.edu/MA154 and hit the link to SAGE, The Online Homework System.

o **Username and Password**: Use you Purdue Career Account username and password. It is just like logging into SSINFO.

o **Problems**? Go to the MA 154 web page to link to the SAGE Discussion Board. It is an open forum that has a live moderator Sunday night, Tuesday night and Thursday night from 8:00 PM to 10:00 PM to answer your questions. He will also answer questions posted during off hours.

Getting started:
o Go to the web site listed and log in using the above instructions.
o Click on the pull down menu for "Choose a lesson", highlight "1", and click on "Go to that lesson".
o Work out the problem; type your answer in the box provided, and click the button at the bottom of the problem, "Submit answer."
o If the answer is correct, the box disappears and the answer cannot be changed.
o If the answer is incorrect, the box remains and you need to calculate and enter a different answer. Keep trying, as there is no penalty for multiple attempts.
o When the answer is correct, or you have given up, go to the top of the page and scroll to, "Problem #2". Click, "Go to that problem" You are now off and running.
o Lessons will always be due at midnight on the day you review the homework in class, except for the ones due Friday, they will be due Saturday night at midnight.
o You will still be able to access and answer the questions to lessons whose deadlines have passed; however, you will not receive any additional credit.
o Each homework assignment is worth 10 points. The top of each page gives the chapter, section and problem number from the text.
o **Note**: Not all problems from the assignment sheet are programmed in SAGE. The ones not in SAGE are printed in **bold print** on the assignment sheet. You should work these problems on paper and bring them to class. They will not be graded; however, they represent potential exam questions.

System Stuff:
o You can work from a home computer or from a Purdue lab.
o Problem sets are individually generated for each student. While your questions will be similar to other students' questions, your answers will not be the same.
o Your problem set does not change no matter how many times you log in or out. You can print out your questions, log out, work them, log back in, and test your answers. You will always have the same problems with the same numbers.

- o Use the print button on your browser to print out each problem. That will generate one page per problem. There is no way to print out the entire lesson at one time.
- o The system is set to log you out if your session has been inactive for twenty minutes. If you walk away from the computer or take a long time to work a problem, you may have to log back in. You may want to hit, "Submit answer" to keep your session active.
- o Answers are saved by the system when you hit submit, log out, are timed out, or go to a new problem or lesson using a pull down menu.
- o You never have to tell us when you are finished working the assignment. You can work up to the time that the assignment is due.
- o <u>Do not use the, "Back" or "Forward" buttons in your browser</u>. Only use the pull down menus to move between problems or lessons.
- o Each answer box is worth equal points in the lesson. If there are 20 boxes in an assignment, spread among 11 questions, then each answer box is worth ½ point.

LOGGING OUT:
- o There is a Logout button at the bottom of each page. PLEASE make sure to use it when you wish to leave the system. Otherwise, you have to wait 20 minutes to log back in.

Notation help: Look this over before asking how to enter an answer.
- o A $= m\angle\alpha$, B $= m\angle\beta$, C $= m\angle\gamma$. $3\cos(\alpha)$ is entered as 3*cos(A).
- o The degree symbol is already on the screen; do not try to type it with your answer.
- o $\dfrac{\sqrt{2}}{2}$ is entered as: sqrt(2)/2 and $6\sqrt{2}$ is entered as : $6*$sqrt(2)
- o $\dfrac{7\pi}{4}$ is entered as : $7*$Pi/4 and $\dfrac{\pi}{4}$ is entered as : Pi/4 (The P in Pi has to be capitalized)
- o $x = \dfrac{\pi}{6} + 2\pi n, x = \dfrac{5\pi}{6} + 2\pi n$ is entered as Pi/6+2*Pi*n, 5*Pi/6+2*Pi*n
- o $\tan^{-1}\left(\dfrac{7}{3}\right)$ is entered as : arctan(7/3)
- o $\dfrac{9}{\sqrt{2}}$ can be entered as 9/sqrt(2) or $9*$sqrt(2)/2
- o $2i$ is entered as : $2*$I (The I has to be capitalized)
- o Undefined, or No Solution, is entered as undefined
- o Infinity and negative infinity are entered as: +inf. and –inf. (the period is necessary)
- o Always use comma to separate multiple answers unless otherwise instructed.
- o x^2 is entered as x^2. $\dfrac{1}{\sqrt{1+x^2}}$ is entered as 1/sqrt(1+x^2).

Errors: Here are some possible reasons why your answer is incorrect.
- o You may simply have the wrong answer.
- o You may be answering in degrees when the problem is asking for radians, or visa versa.
- o You may have made a rounding error, or rounded too soon.
- o Your calculator may be in the wrong mode.
- o **In a multi-part problem, you may have carried forward a rounded solution from one part of the problem to the next. Use the entire calculator readout to calculate the next part.**
- o The problem is asking for the exact answer and you are entering an approximated answer.