## COLLEGE ALGEBRA

## MATH 1050, Course \#31384, Spring 2006

http:/ / faculty.weber.edu/aghoreishi/Math1050_s06/Math1050_s06.asp/

Quantitative Literacy: There are several ways of achieving quantitative literacy. Take college algebra only if it is required by your major. Otherwise, to achieve quantitative literacy take Math 1030 or Math 1040. Math 1030 is particularly suitable for students in the College of Arts and Humanities. All other students will most benefit from Math 1040.

Prerequisite: Math 1010 with a grade of C or better, or ACT with score of 23 or higher, or Placement Test.
Text: College Algebra, A Custom Edition for Weber State University, Pearson, ISBN 0-536-73216-7.
Class Meetings: MWRF 10:00-10:50, B4 Rm. 511.
Instructor and Office Hours: Dr. Afshin Ghoreishi, B4 Rm. 505A, http:/ / faculty.weber.edu/aghoreishi/, M 11:00-11:50, W 9:00-9:50, R 8:00-9:50 and F 9:00-9:50. At other times, you can see me whenever I am in my office and not busy. You can also see me by making an appointment.

## General Instructions

Learning Mathematics: One learns mathematics by doing it. Struggling is a part of learning. There is no substitute for working on and solving problems on your own.

Reading a Mathematics Book: Read mathematics books with a scratch paper and a pencil close by. Use them to work through the parts left for the reader to figure out and/or redoing the parts that are not clear. Do not expect to fully master every topic in the first reading.

Writing Mathematics: Mathematics, like English, requires proper use of grammar. The process of learning a topic and accurately communicating that knowledge are intimately related. The objective is not just to find the answer to problems but also to communicate the work involved through writing.

Getting Ready for a Test: In addition to studying homework problems, class notes, and sample tests, you should develop a set of short notes and sample problems on each topic. Develop these notes after learning each topic. Use your notes as a reference and review them before a test. This technique will solve the problem of forgetting or confusing things on the tests and will enable you to attain that higher grade which you deserve.

## Specific Instructions

Procedures: I will try to answer a few questions at the beginning of each class, but this time will be limited. Be prepared for each class by working on prior homework and reading the book ahead of time. You are encouraged and expected to read the book on your own. Utilize office hours and other sources of tutoring.

We will have weekly homework, three 1-hour exams and a comprehensive 2-hour final exam. Do not enter the class late \& do not come to class if you have to leave early. Turn off pagers, cell phones and other such disruptive devices.

Homework: A problem list composed of two parts is attached. To be successful in this class you should be able to solve all of them. I will collect all problems listed under the heading "To be Turned In". Every Wednesday I will announce the sections which will be due. Homework will be due Friday 12:00 noon, in the gray plastic holder on my office door. The first homework is a review of necessary algebraic skills for success in this course.

Do not solve problems side-by-side, write only on one side of each page and staple your homework. Write your name on the top center position of front page and number your pages as, for example; $1 / 7,2 / 7, \ldots, 7 / 7$ (if there are a total of 7 pages), on the top right hand corner of each page. No late homework will be accepted.

Fun Problems: Fun Problems is a collection of interesting problems available on the course website. You can use these problems to earn up to 20 extra points in the course. You may submit up to 5 problems and earn an extra 4 points for each correct and complete solution. No partial credit will be given. All solutions are due the last day of class.

Exams: Exams will not require graphics or programmable calculators and these calculators are not allowed.. However, you may use a scientific calculator.

| $1^{\text {st }}$ Exam | Mon, Feb | 6 (tentatively sections 1.7-3.2) |
| :--- | :--- | :--- |
| $2^{\text {nd }}$ Exam | Wed, Mar | 8 (tentatively sections 3.3-5.4) |
| $3^{\text {rd }}$ Exam | Thurs, Apr | 20 (tentatively sections 6.1-8.7) |
| Final Exam | Thur, May | $4(9: 30-11: 30)$ |

Sample tests will be available from my website: http://faculty.weber.edu/aghoreishi/. No make-up exam will be given.

Grading: Exams will be curved as needed, but a minimum standard will be retained regardless of the class performance. A typical exam scale is $[0,50) \mathrm{E},[50,65) \mathrm{D}$ range, $[65,77$ ) C range, $[77,88) \mathrm{B}$ range, $[88,100] \mathrm{A}$ range. Homework will have the standard scale and you will be given the opportunity to replace your lowest homework grade with your grade on a special assignment at the end of the semester.

| One-hour exams; 100 points each | 300 points | $(16 . \overline{6}$ percent each $)$ |
| :--- | :---: | :---: |
| Homework | 100 points | $(16 . \overline{6}$ percent) |
| Fun Problems (optional) | 20 extra points |  |
| Final Exam | 200 points | $(33 . \overline{3}$ percent) |
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## Miscellaneous Information

Extra Help: College Algebra courses have supplemental instructors. The time and location of supplemental instruction sessions will be announced later. The Solution Space, B4 Rm. 519, is also a good place to study. I highly encourage you to take advantage of available tutoring. The following is a partial list of tutoring sources.

1. Solution Space, B4 519.
2. Math Tutoring Lab, SC 164, 626-math (6284).
3. Student Support Services, SC 260, 626-7009.
4. Tutoring Services, SC 160, 626-7484.
5. Supplemental Instruction, SC 262.

All other tutoring information should be available from the website http://weber.edu/MTL/1050_help.

## Other Important Dates:

| Martin Luther King Day | Jan | 16 |
| :--- | :--- | :--- |
| Last day to cancel | Jan | 27 |
| Presidents' Day Holiday | Feb | 20 |
| Last day to drop with a grade of W | Mar | 10 |
| Spring Break | Mar | $13-17$ |

If you decide to drop this class, please inform me of your decision.

| Course Coverage and Problem List for College Algebra |  |  |
| :---: | :---: | :---: |
| Section | Problems | Problems To Be Turned In |
| 1.7 | 57-84(multiples of 3), 97-100 | 63, 72, 75, 78, 81, 99 |
| 1.8 | 3-48(multiples of 3), 25, 49-53, 73, 74 | 18, 25, 36, 45, 48, 52, 73, 74 |
| 2.3 | 3-72(multiples of 3) | 6, 15, 27, 39, 48, 60, 72 |
| 2.4 | 3-30(multiples of 3), 31-38, 39-48(multiples of 3), 49, 63-73(multiples of 3), 73-82 | 6, 9, 21, 36, 38, 49, 63, 66 |
| 2.5 | 3-51(multiples of 3), 67-70 | 6, 12, 21, 33, 45, 48, 51, 68 |
| 2.6 | 3-57(multiples of 3) | $3,12,27,30,36,42,54$ |
| 2.7 | 3-30(multiples of 3), 31-40 | 6, 15, 18, 27, 33, 38 |
| 3.1 | 1-8, 9-39(multiples of 3), 43, 47-49 | 12, 27, 30, 36, 43, 47, 48 |
| 3.2 | 1-26, 27-48(multiples of 3) | 36, 39, 42, 45, 48 |
| 3.3 | 3-30(multiples of 3), 33-42 | 15, 24, 36, 38, 40, 41 |
| 3.4 | 1-7(odd), 9-21 (multiples of 3), 29-33(only use rational zero theorem and factoring), 47, 48 | $6,9,12,18,21,30$ (only use rational zero theorem and factoring), 47 |
| 3.5 | 9-21(multiples of 3), 23-28, 30, 31, 33, 34, 37-44, 62, 63, 65 | $12,15,18,24,34,38,41,62$ |
| 3.6 | 1-19(odd), 21-66(multiples of 3), 93-96(do not graph) | 24, 36, 42, 48, 54, 60 |
| 4.1 | 3-18(multiples of 3), 19-24, 27-39(multiples of 3), 41-44, $46,47,50,55,57$ (a, b), 60,71 | 15, 30, 36, 42, 50 |
| 4.2 | $\begin{aligned} & \text { 3-42(multiples of 3), 38, 43-48, 51-72(multiples of 3), } \\ & 75-80,83,85 \end{aligned}$ | $27,38,42,51,60,66,78,85$ |
| 4.3 | 3-78(multiples of 3), 83, 101-103 | 27, 36, 45, 60, 66, 72, 83 |
| 4.4 | 3-52(multiples of 3), 19, 53, 56, 59, 61, 65, 68, 69, 88 | 12, 19, 21, 36, 39, 48, 56, 59 |
| 4.5 | 1-4, 9, 11, 13-17, 20-23, 25(a, b), 26(a, b), 31, 32, 54 | 3, 9, 11, 16, 17, 20, 21 |
| 5.2 | 3-18(multiples of 3), 19-24, 31-35 | $6,12,15,19,22,32,34$ |
| 5.4 | 3-42(multiples of 3), 43, 44, 47, 50-52 | 6, 12, 21, 27, 36, 42, 43, 52 |


| Course Coverage and Problem List for College Algebra |  |  |
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| Section | Problems | Problems To Be Turned In |
| 6.1 | $1,2,7,9,14,17,21,22,27-41$ (multiples of 3), 45, 47 | $27,30,36,42,45,47$ |
| 6.2 | $3-24$ (multiples of 3), 30, 31 | $3,6,12,18,30$ |
| 6.3 | $3-36$ (multiples of 3), 37-44 | $12,21,33,39,40$ |
| 6.4 | $3-42$ (multiples of 3) | $6,9,18,24,33,39$ |
| 6.5 | $3-42$ (multiples of 3) | $6,15,30,36,42$ |
| 8.1 | $3-60$ (multiples of 3), 26, 52 | $12,18,26,36,39,52,57$ |
| 8.2 | $3-48$ (multiples of 3), 43, 57, 60-62, 71, 73 | $12,21,24,36,43,48,60,71$ |
| 8.3 | $3-60$ (multiples of 3), 34, 40, 57, 63, 67, 75 | $12,21,30,34,40,48,54,63$ |
| 8.4 | $1-9$ (odd), 12-24(multiples of 3), 25, 29, 33 | $7,12,13,18,21,24$ |
| 8.5 | $3-48$ (multiples of 3), 73 | $6,12,21,36,42,48$ |
| 8.6 | $3-57$ (multiples of 3), 69, 71, 72 | $3,12,18,30,36,48,54$ |
| 8.7 | $3-51$ (multiples of 3), 19, 20, 37, 43 | $6,11,18,19,24,30,36,48$ |
| Supp 3.2 | $27,28,43,44,59-62$ | $28,44,59,60$ |
| Supp 3.3 | $1-9$ (odd), 13-20, 23-31(odd), 24 | $14,15,20,24,25,29$ |
| Supp 3.4 | $1-11$ (odd), 13-20, 25-28 | $14,17,20,26,27$ |

