1) **Welcome:** I, Terry Green, your Math 20 teacher for the spring semester of 2007, am thrilled to have you as a student! I am on your side and I really want you to learn Intermediate Algebra so well that you can successfully move on to the next level and beyond!

2) **Course Outline for Math 20:** These pages of information contain the guidelines for this course and should be read carefully so you will know what is expected of you. They contain information about attendance, grades, homework, exams, etc.

3) **Information about your Instructor:**
   - My Name: Terry Green
   - My SMC Telephone #: (310) 434-4728
   - My SMC E-Mail Address: green_terry@smc.edu
   - My SMC Web page: http://homepage.smc.edu/green_terry/
   - My Office Hours in MC 32: Tuesday and Thursday 3:15-4:15
   - My Lab Hours in the Quiet Room: Wednesdays 11-12 Math 20 Workshop

4) **Textbooks:**
   - The **required** textbook for Math 20 you must purchase: *Intermediate Algebra 7th Edition by R. David Gustafson and Peter D. Frisk*

5) **Materials you need to purchase for this course at our SMC bookstore or elsewhere:**
   - A) 1 notebook for the notes you will take every day in this class
   - B) 5 small blue books for exams
   - C) 1 large blue book for the final examination
   - D) 6 SCANTRON Sheets Form #882-ES LOVAS which are the answer sheets for the exams.
   - E) Quite a few regular #2 pencils for math work and a ruler for graphing
   - F) 1 folder to submit your homework packages which are turned in on exam day.
   - G) 1 scientific calculator if you do not already own one. We will use them extensively when we study logarithms. The bookstore sells some Casio models I really like.

6) **Calculator Policy:** Scientific calculators are valuable tools to help you learn mathematics. In terms of exams, they can only be used on the 5th exam and on the final.
7) **Prerequisites for Math 20:** You should have completed Math 31 or Math 31(T) Elementary Algebra with a grade of C or better. Or you should have a score on the SMC placement test that allows you to take Math 20.

8) **Tardiness Policy:** I watched Dr. Phil one afternoon and he explained that when people are late, they are being thoughtless of others. I imagine you show up for work or time and so I am expecting you to show up on time to my class!

9) **Cell Phone and Beeper Policy:** When they go off in class, it is truly annoying not only to your fellow students but to your instructor as well. Turn them off! And put them away once the class has begun!

10) **Attendance Policy:** I am expecting that you will attend every class session because at every class meeting we will cover important concepts and applications. If you are absent more than four times, you may be withdrawn from the class.

If you are absent for a class session, you do not need to contact me. If you are going to be absent for an extended period of time because of illness or causes beyond your control, you can easily leave me a message on my SMC voice mail (310) 434-4728 or e-mail me at green_terry@smc.edu to let me know what is happening. I usually do not call or write back because I know I will see you when you return to class.

11) **Withdrawal Policy:** You can get a “W” in this course on your own at our SMC administration office any time during the first 8 weeks of the semester. The absolute last week I can give you a “W” is Thursday of the 12th week (May 10th) so if you would prefer to get a “W” during that week, you must communicate directly with me. After May 10th, it is impossible to withdraw unless there are extenuating circumstances.

12) **Grades:** Your spring semester grade will be determined as follows:
   A) Your best 4 out of 5 exams are worth 60% of your grade or 600 points.
   B) Your final exam is worth 28% of your grade or 280 points.
   C) Your test corrections are worth 2% of your grade or 20 points.
   D) Your homework is worth 10% of your grade or 100 points.
   E) Thus, at the end of the spring you could have a total of 1,000 points.

13) **How your final grade is determined in June is according to your final total:**
   A) If your total is 895 points or more, (89.5% or more), you will earn an A.
   B) If your total is 795 to 894 points (79.5% to 89.4%), you will earn a B.
   C) If your total is 695 to 794 points (69.5% to 79.4%), you will earn a C.
   D) If your total is 0 to 694 points (0% to 69.4%), you will earn a D.

14) **Additional Information about Grades:**
Because I consider homework so critical to your learning mathematics, if you do not complete and submit the majority of it, the highest grade you will be able to receive no matter how many points you have earned will be a D. Furthermore, if you fail the final (less than 50%) your grade will be a D no matter what your point total.
15) Homework: As mentioned above, homework is critical to your learning Intermediate Algebra. You are expected to work on the sections taught in class as soon after they are taught as possible. You will collect your homework assignments and turn them in as a package the day of each exam. 5 homework packages and the practice final will be collected. You should do your homework packages as completely and as accurately as possible always attempting to do your very best quality work. Recall that the homework packages are worth 10% of your grade or 100 points.

16) More about Homework:
   A) Use pencil rather than pen to do your homework packages so you can take advantage of the eraser!
   B) The first page of your homework package must be the Table of Contents of that particular homework package. You should Xerox the following package lists and check off the assignments you completed. You MUST number your pages of your package LIKE ANY BOOK so that it is easy for me to find your various assignments.
   C) Show all your work. Answers alone are unacceptable and your homework package will be returned un-graded if you simply submit just the answers. If your work looks like all you did was copy from the solutions manual, the grade will be dropped to a D. The solutions manual is a tool to help you learn and should not be misused.
   D) Clearly mark each homework assignment that you complete at the top of the page so that you can turn in your work in an organized fashion from the first assignment in the package to the last. For example, after the table of contents in the first package, would come assignments from the sections in Chapter 1. Then you would have the Chapter 1 Review Problems and then you would begin the Chapter 2 assignments. Any extra credits would be at the end of the homework package in the order listed in the Table of Contents.
   E) When you start a new assignment, use a new piece of paper. Use both sides of the paper to save our forests!
   F) Work top down in an orderly fashion showing your steps. Try to arrange your work so that anyone else could easily understand what you are trying to do. Note your final answer to each problem.
   G) The answers to all problems assigned other than a few can be found at the back of the book. Use it as a resource to check your work for accuracy and if you find you have an error, try the problem again. If you are still having trouble, get assistance in the math lab or from a friend or family member.
   H) Turn in your homework package in a folder with your name clearly written on the Table Of Contents. The folder should easily open and the Table Of Contents should be the first page I see. Please do not use the type of folder where all of the pages have to be taken out of the folder for me to see them.
   I) Submit only one homework package in a folder and take out any homework packages that have been previously graded.
17) Which Homework Problems to do:
A) Every other odd (EOO) are problems 1,5,9,13,17, etc. Just add 4!!!
B) ODDS indicates you do 1,3,5,7,9, etc. Read the problem sets you are do in each section in the assignments lists that follow on pages 5 through 9.

18) Helpful Hints To Be Successful in Math 20:
A) Attend class on a regular basis. Statistics prove that students who attend class on a regularly have much greater success since learning mathematics is a step-by-step process. Every time you miss class, you are missing vital information that will make it difficult to grasp later mathematical concepts.
B) Be involved in the class. Math is not a spectator sport! Be an active listener and take good notes, writing down key ideas and examples that are presented. Ask questions when you are unclear about different mathematical ideas.
C) Preview new material. Before going to class, look over the sections your instructor is going to explain the next day. This will help you have some idea what is to come and allow you to consider possible questions you might wish to raise in class.
D) Take time to do your homework and do it soon after it has been explained. Mathematics can be a lot of fun when you understand what you are doing!
E) Stay up with the class. When you get behind in a math class, disaster is sure to happen!
F) Make friends in class. Classmates can make great study partners, take notes for you when you miss class and encourage you when you may be struggling. In fact, studies indicate people who work together to learn mathematics usually are more successful.
G) Seek assistance. Sometimes, even when you attend class regularly, take careful notes, study your textbook and do all the homework, you still find that you do not understand certain concepts. If this happens visit your instructor during his office hours for help or go to the math lab to get help from an instructional assistant or tutor. Sometimes a different approach from an outside source may help clarify concepts you may be having difficulty understanding.
H) Be neat, accurate and well organized. You should always attempt to do quality work on all homework packages and exams.
I) Never give up! An interesting characteristic of learning mathematics is that at one moment you may be totally confused, and then suddenly the light bulb goes on and you understand the material! Some mathematical ideas take awhile to digest and you might find after a few days of working some of the problems related to those ideas that they actually do make sense!
J) Prepare for your exams. In math courses, your show whether you know the material on exams. Study for exams by doing any practice exams provided by your instructor.
K) Congratulate yourself when you learn new material! As you learn new concepts, point out to yourself what you have learned so that your confidence in your mathematical ability will increase.
Package #1 – Due Thursday, March 1st, 2007

Check off each assignment you complete in the left-hand space provided, or highlight each assignment completed. Of course, you are going to complete all of them! Also fill in the page numbers from your homework on your Xeroxed copy of this Table of Contents!

Note #1: The date listed is the tentative date the assignment will be explained.
Note #2: Your page number is the page number in your homework package of your work, not the page numbers in the book where the homework problems are!
Note #3: Chapter review exercises are to be done as soon as all of the chapter assignments are completed. It is important to do these review exercises in order to really learn the concepts and applications being presented in each of the chapters.

Chapter 1: A Review of Basic Algebra

1.1 The Real Number System (1-97 EOO) F 12: Your Page #______
1.3 Exponents (1-157 EOO) F13: Your Page #______
1.5 Solving Equations (1-117 EOO) F 13, 14: Your Page#______
1.6 Using Equations to Solve Problems (1-61 EOO) F 14,15: Your Page #______
1.7 More Applications of Problems (1-41 EOO) F 15, 20: Your Page #______
Chapter 1 Review Exercises (1-117 EOO) Your Page #______

Chapter 2: Graphing Equations of Lines, and Functions

2.1 Graphing Linear Equations (1-85 EOO) F 20: Your Page #______
2.2 Slope of a Non-vertical Line (1-81 EOO) F 21: Your Page #______
2.3 Writing Equations of Lines (1-97 EOO) F 21, 22: Your Page #______
2.4 Introduction to Functions (1-85 EOO) F 22, 26: Your Page #______
2.5 Graphs of Other Functions (1-69 EOO) F 26: Your Page #______
Chapter 2 Review Exercises (1-53 EOO) Your Page #______

Extra Credits to be placed in your homework package in the following order after the Chapter 2 Review Exercises:

A) CHAPTER 1 TEST IN BOOK (ALL) Value: 1 P# ______
B) CHAPTER 2 TEST IN BOOK (ALL) Value: 1 P# ______
C) CUMULATIVE REVIEW AT END OF CHAP 2 (ALL) V: 1 P# ______
D) ALL SELF CHECKS IN EACH SECTION V: 5 P# ______
E) PRACTIVE EXAM 1 (HANDOUT 10 ON WEB) V: 2 P# ______
F) HANDOUTS 4, 5, 6,7, 8 OR 9 ON WEB Value: 1 EACH P# ______

Exam #1 on Chapters 1-2 is scheduled for Thursday, March 1st. Homework Package #1 is due the same day!!! We will review for Exam #1 on Wednesday, February 28th.
Package #2 – Due Thursday, March 15th, 2007

Check off each assignment you complete in the left-hand space provided, or highlight each assignment completed. Of course, you are going to complete all of them! Also fill in the page numbers from your homework on your Xeroxed copy of this Table of Contents!

Note #1: The date listed is the tentative date the assignment will be explained.
Note #2: Your page number is the page number in your homework package of your work, not the page numbers in the book where the homework problems are!
Note #3: Chapter review exercises are to be done as soon as all of the chapter assignments are completed. It is important to do these review exercises in order to really learn the concepts and applications being presented in each of the chapters.

Chapter 3: Systems of Equations

3.1 Solution by Graphing (1-49 EOO) F 26,27: Your Page #
3.2 Solution by Elimination (1-45 EOO) F 27, M 5: Your Page #
3.3 Three Equations in Three Variables (1-37 EOO) M 6: Your Page #
3.4 Solution by Matrices (1-45 EOO) M 6,7: Your Page #
Chapter 3 Review Exercises (1-17 ODDS) Your Page #

Chapter 4: Inequalities

4.1 Linear Inequalities (1-85 EOO) M 7: Your Page #
4.2 Equa. + Inequa. With Absolute Values (1-113 EOO) M 12: Your Page #
4.3 Linear Inequalities in Two Variables (1-45 EOO) M 13: Your Page #
4.4 Systems of Inequalities (1-23 ODDS) M 13: Your Page #
Chapter 4 Review Exercises (1-33 ODDS) Your Page #

Extra Credits to be placed in your homework package in the following order after the Chapter 4 Review Exercises:

G) CHAPTER 3 TEST IN BOOK (1-6,11-12, 21-22 ALL) V: 1 P#
H) CHAPTER 4 TEST IN BOOK (1-18 ALL) Value: 1  P#
I) CUMULATIVE REVIEW AT END OF CHAP 4 (ALL) V: 1 P#
J) ALL SELF CHECKS IN EACH SECTION V: 5 P#
K) PRACTIVE EXAM 2 (HANDOUT 15 ON WEB) V: 2 P#
L) HANDOUTS 11, 12, 13 OR 14 ON WEB Value: 1 EACH P#

Exam #2 on Chapters 3-4 is scheduled for Thursday, March 15th. Homework Package #2 is due the same day!!! We will review for Exam #2 on Wednesday, March 14th.
Package #3 – Due Thursday, April 19th, 2007

Check off each assignment you complete in the left-hand space provided, or highlight each assignment completed. Of course, you are going to complete all of them! Also fill in the page numbers from your homework on your Xeroxed copy of this Table of Contents!

Note #1: The date listed is the tentative date the assignment will be explained.
Note #2: Your page number is the page number in your homework package of your work, not the page numbers in the book where the homework problems are!
Note #3: Chapter review exercises are to be done as soon as all of the individual assignments are completed. It is important to do these review exercises in order to really learn the concepts and applications being presented in each of the chapters.

Chapter 5: Polynomial and Polynomial Functions

- 5.1 Polynomials + Polynomial Functions (1-81 EOO) M 19: Your Page #
- 5.2 Adding + Subtracting Polynomials (1-73 EOO) M 19: Your Page #
- 5.3 Multiplying Polynomials (1-125 EOO) M 20: Your Page #
- 5.4 The GCF + Factoring by Grouping (1-125 EOO) 20, 21: Your Page #
- 5.5 Factoring Special Forms (1-73 EOO) M 21, 22: Your Page #
- 5.6 Factoring Trinomials (1-125 EOO) M 22: Your Page #
- 5.7 Summary of Factoring Techniques (1-61 EOO) M 26: Your Page #
- 5.8 Solving Equations by Factoring (1-93 EOO) M 26, 27: Your Page #
- Chapter 5 Review Exercises (1-85 EOO) Your Page #

Chapter 6: Rational Expressions

- 6.1 Rational Functions + Simplifying (1-117 EOO) M 28: Your Page #
- 6.2 Proportion + Variation (1-81 EOO) M 28, 29: Your Page #
- 6.3 Multiplying + Dividing (1-69 EOO) M 29: Your Page #
- 6.4 Adding + Subtracting (1-105 EOO) A 2: Your Page #
- 6.5 Complex Fractions (1-37 EOO, 41-48 ALL) A 3: Your Page #
- 6.6 Equations With Rational Expressions (1-61 EOO) A 3, 4: Your Page #
- 6.7 Dividing Polynomials (1-69 EOO) A 5: Your Page #
- 6.8 Synthetic Division (1-53 EOO) A 5: Your Page #
- Chapter 6 Review Exercises (1-53 EOO) Your Page #

Extra Credits to be placed in your homework package in the following order after the Chapter 6 Review Exercises:

- M) CHAPTER 5 TEST IN BOOK Value: 1 P#
- N) CHAPTER 6 TEST IN BOOK (1-24 ALL) Value: 1 P#
- O) CUMULATIVE REVIEW AT END OF CHAP 6 (ALL) V: 1 P#
- P) ALL SELF CHECKS IN EACH SECTION V: 5 P#
- Q) PRACTICE EXAM 3 (HANDOUT 19 ON WEB) V: 2 P#
- R) HANDOUTS 16, 17 OR 18 ON WEB Value: 1 EACH P#

Exam #3 on Chapters 5-6 is scheduled for Thursday, April 19th. Homework Package #3 is due the same day!!! We will review for Exam #3 on Wednesday, April 18th.
## Package #4 – Due Monday, May 14th, 2007

Check off each assignment you complete in the left-hand space provided, or highlight each assignment completed. Of course, you are going to complete all of them! Also fill in the page numbers from your homework on your Xeroxed copy of this Table of Contents!

Note #1: The date listed is the tentative date the assignment will be explained.
Note #2: Your page number is the page number in your homework package of your work, not the page numbers in the book where the homework problems are!
Note #3: Chapter review exercises are to be done as soon as all of the chapter assignments are completed. It is important to do these review exercises in order to really learn the concepts and applications being presented in each of the chapters.

### Chapter 7: Radicals and Rational Exponents

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<td>7.3 Rational Exponents (1-141 EOO)</td>
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<td>7.4 Simplifying and Combining (1-113 EOO)</td>
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<td>7.5 Multiplying and Dividing (1-93 EOO)</td>
<td>A 25: Your Page #</td>
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<tr>
<td>7.6 Radical Equations (1-65 EOO and #66)</td>
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<td>7.7 Complex Numbers (1-97 EOO)</td>
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### Chapter 8: Quadratic Functions, Inequalities, and Algebra of Functions

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<td>8.3 The Discriminant (1-13, 29-61 EOO)</td>
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<td>8.5 Nonlinear Inequalities (1-33 EOO+ #55, 65)</td>
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Extra Credits to be placed in your homework package in the following order after the Chapter 8 Review Exercises:

- S) CHAPTER 7 TEST IN BOOK (ALL) Value: 1 P#_______
- T) CHAPTER 8 TEST IN BOOK (1-24 ALL) Value: 1 P#_______
- U) CUMULATIVE REVIEW AT END OF CHAP 8 (ALL) V: 1 P#_______
- V) ALL SELF CHECKS IN EACH SECTION V: 5 P#_______
- W) PRACTICE EXAM 4 (HANDOUT 25 ON WEB) V: 2 P#_______
- X) HANDOUTS 20, 21, 22, 23, OR 24 ON WEB Value: 1 EACH P#_______

Exam #4 on Chapters 7-8 is scheduled for Monday, May 14th. Homework Package #4 is due the same day. We will review for Exam #4 on Thursday, May 10th.
Package #5 – Due Thursday, May 31st, 2007

Check off each assignment you complete in the left-hand space provided, or highlight each assignment completed. Of course, you are going to complete all of them! Also fill in the page numbers from your homework on your Xeroxed copy of this Table of Contents!

Note #1: The date listed is the tentative date the assignment will be explained.
Note #2: Your page number is the page number in your homework package of your work, not the page numbers in the book where the homework problems are!
Note #3: Chapter review exercises are to be done as soon as all of the chapter assignments are completed. It is important to do these review exercises in order to really learn the concepts and applications being presented in each of the chapters.

Chapter 9: Exponential and Logarithmic Functions
- 9.1 Exponential Functions (1-33 EOO +45, 49) M 15: Your Page #_____
- 9.2 Base-e Exponential Functions: (1-33 EOO) M 16: Your Page #_____
- 9.3 Logarithmic Functions (1-93 EOO) M 17: Your Page #_____
- 9.4 Base-e Logarithms (1-33 EOO) M 21: Your Page #_____
- 9.5 Properties Of Logarithms (1-85 EOO) M 22: Your Page #_____
- 9.6 Exponential + Logarithmic Equa (1-65, #75,76) M 23:Your Page #_____
- Chapter 9 Review Exercises (1-77 EOO, #83) Your Page #_____

Chapter 10: More Graphing
- 10.1 The Circle and the Parabola (1-45 EOO) M 24: Your Page #_____
- 10.4 Simultaneous Second-Degree Equations (1-33 EOO) M 29:Your Page #_____
- 10.5 Piecewise Defined Functions (1-15 ODDS) M 29: Your Page #_____
- Chapter 10 Review Exercises (1-5, 13-17 ODDS) Your Page #_____

Extra Credits to be placed in your homework package in the following order after the Chapter 10 Review Exercises:
- Y) CHAPTER 9 TEST IN BOOK (ALL) Value: 1 P#_____
- Z) ALL SELF CHECKS IN EACH SECTION V: 5 P#_____
- A) PRACTICE EXAM 5 (HANDOUT 28 ON WEB) V: 2 P#_____
- B) HANDOUT 27 ON WEB Value: 1 P#_____

Exam #5 on Chapters 9-10 is scheduled for Thursday, May 31st. Homework Package #5 is due the same day! We will review for Exam #5 on Wednesday, May 30th.

We will go over 11.3 Sigma Notation (55-60, 73-76 ALL) and the Practice Final (Handout 29 on the Web) on Monday, June 4th. The 9:30 section has its Final on Thursday, June 7th from 8 to 11 AM. The 2:00 section has its final on Wednesday, June 6th from 3:30 to 6:30 PM.