

Makeups, Late Work, Extra Help Makeup exams are given only in extraordinary conditions and are greatly discouraged. Any makeup exams administered will be given during instructor's office (half) hours only. No makeups are possible on quizzes or group work. Late homework and worksheets may be submitted on Dec. 10 (Final Exam Night) for partial credit (up to one-half the original point score). The lowest exam score and lowest quiz score will be dropped. Plan to attend every class session. If you must miss a class, email foremann@wlac.edu in advance. The schedule in this syllabus will let you know what section(s) of the text will be covered that date. Try to read that night's sections on your own and attempt the homework problems. For extra help, you can look for an instructional video at www.khanacademy.com or on YouTube. If you can't figure it out on your own, consult a tutor or use the instructor's office hour to get help. The textbook publisher maintains a free online homework site at <http://interactmath.com/home.aspx>; select our textbook from the drop down menu to work problems from the review sections for each chapter.

Homework Instructions. For full credit, homework papers must be given in order, neat and legible, necessary and sufficient work shown, with the section number of each book section written in the upper right hand corner of the page on which it is worked. If this is not done the homework will be returned to you ungraded. Submit homework on the corresponding exam day. Homework will be assigned for each section and most class sessions will include some time to review homework questions, usually at the end of class. Expect to study and work problems for at least 10 hours per week, or two hours study time for every classroom hour. Homework and reading assignment list is given below.

How to pass. Attend class, complete all homework and submit all work on time, stay on top of things and don't fall behind. Practice until you have mastered each new technique. We're not kidding about the 10 hours study time per week (or more, in some cases). Anybody can do this stuff, it just takes time, energy and attention to detail.

Attendance & participation policy Every student is expected to maintain regular attendance, arriving on time and staying for the full class session. If roll call is missed, the student is marked absent for the night. Every student is required to participate in all class activities, which may include worksheets, board work, group work, or other activities. College policy states that an instructor may drop a student who has missed more than five hours of class, or one week total. While students who do not attend class may be dropped, if you decide that you cannot complete the class, it is YOUR responsibility to drop (withdraw) on or before Nov. 15, 2013. Please consult with me if you are considering dropping the class. I would like to try to help you make a plan to succeed.

Etiquette & Discipline Please respect your classmates and the instructor, and refrain from disruptive behaviors such as coming late, leaving early, wandering in and out of class, eating or drinking during class, side conversations, instant messaging, websurfing, etc. If you are in doubt, consider if your behavior is distracting or disruptive to others. If so, please stop. Let us maintain a civil atmosphere conducive to learning and thought. All college rules and regulations will be enforced; see the West Los Angeles College Catalog online at http://www.wlac.edu/academics/pdf/WLAC_12-14Catalog_FRONT.pdf (starting p. 41).

Academic dishonesty Cheating will not be tolerated. Maintain the highest standards of academic honesty. You may not give or receive help on tests or quizzes, and you may not turn in someone else's work as your own. If academic dishonesty is detected, a score of zero will be assigned, and the student(s) involved may be reported to the administration.

Instructional Methods This course is taught using a variety of instructional methods which may include but are not limited to lecture, class discussion, small group work, in-class worksheets.

Extra Credit: Homework Set 7 may be submitted on Final Night (Dec. 11) for up to 10 points extra credit (no other extra credit).

Proposed Class Schedule (subject to change):

Week	Tuesday	Thursday
I	Aug. 27 Introduction to class, Chapter 1 Real number system (review)	Aug. 29 Sec. 2.1, 2.2 Linear Equations Quiz 1 (Syllabus)
II	Sept. 3 Section 2.3, 2.4 Applications of linear equations	Sept. 5 Sec. 2.5, 2.6, 2.7 Linear inequalities, absolute value Quiz 2 (Ch. 1, Sec. 2.1, 2.2)
III	Sept. 10 Exam 1 (covers Ch. 1 and 2), Sec. 3.1 Rectangular coordinate system	Sept. 12 Sec. 3.2, 3.3 Slope, equations in two variables
IV	Sept. 17 Sec. 3.4, 3.5 Inequalities, functions	Sept. 19 Sec. 3.6 Functions Review Quiz 3 (Sec. 3.1–3.3)
V	Sept. 24 Exam 2 (covers Ch. 3) Sec. 4.1 Systems of linear equations	Sept. 26 Sec. 4.2 Systems in three variables
VI	Oct. 1 Sec. 4.3 Applications	Oct. 3 Sec. 4.4 Matrix methods Quiz 4 (Sec. 4.1–4.2)
VII	Oct. 8 Appendix A Determinants, Cramer’s rule, review	Oct. 10 Exam 3 (covers Ch. 4 & App. A) Sec. 5.1 Exponents
VIII	Oct. 15 Sec. 5.2, 5.3 Polynomials and functions	Oct. 17 Sec. 5.4, 5.5 Operations on polynomials Quiz 5 (Sec. 5.1)
IX	Oct. 22 Appendix B Synthetic Division, Review	Oct. 24 Exam 4 (covers Ch. 5 & App. B) Sec. 6.1 GCF, factoring
X	Oct. 29 Sec. 6.2, 6.3 Factoring techniques	Oct. 31 Sec. 6.4, 6.5 Solving equations by factoring Quiz 6 (Sec. 6.1)
XI	Nov. 5 Exam 5 (covers Ch. 6) Sec. 7.1 Operations on rational expressions	Nov. 7 Sec. 7.2, 7.3 Adding and subtracting rational expressions, complex fractions
XII	Nov. 12 Sec. 7.4, 7.5 Rational equations and graphs, applications	Nov. 14 Sec. 7.5, 7.6 Applications of rational expressions, variation Quiz 7 (Sec. 7.1–7.3)

XII I	Nov. 19 Exam 6 (covers Ch. 7) Sec. 8.1 Radical expressions	Nov. 21 Sec. 8.2, 8.3 Rational exponents, simplifying radicals
XI V	Nov. 26 Sec. 8.4, 8.5 Operations on radical expressions	Nov. 28 Thanksgiving Holiday, No Class
XV	Dec. 3 Sec. 8.6, 8.7 Equations with radicals, complex numbers	Dec. 5 Review for final exam Quiz 8 (Sec. 8.4–8.5)
	Dec. 10 FINAL EXAM	

Special circumstances Students with disabilities or those who need accommodation for any reason must communicate with the instructor in a timely manner to ensure their needs are met. Any paperwork needed must be completed in advance. Contact Disabled Students Programs and Services located in HRLC 119 (phone 310-287-4450).

How to read your algebra textbook Reading is assigned for each covered section of the text. Before each class, skim over the sections that will be covered that day, being sure to look closely at any material that appears in a colored box. Begin to familiarize yourself with the vocabulary and subject matter before class begins. After the material has been covered in class, re-read as necessary for understanding. If possible, work all homework problems before the next class begins. In any case, follow the reading procedure before each class. The homework and reading list below is given as a guide. Assignments may be modified as circumstances dictate. Each night's assignment will be posted on the board along with other important information.

Homework Set 1 Due with Exam 1 on Sept. 10

Section 1.1: Read pp. 2–10, Work Exercises 1–15 odd, 19–31 odd, 43–59 odd, 65–87 odd, 101, 103, 109

Section 1.2: Read pp. 14–20, Work Exercises 1–5 odd, 9, 11–41 every other odd, 57–117 every other odd

Section 1.3: Read pp. 24–28, Work Exercises 1–51 odd, 53–85 odd

Section 1.4: Read pp. 32–36, Work Exercises 1–13 odd, 23–31 odd, 41–51 odd

Section 2.1: Read pp. 48–53, Work Exercises 1–9 odd, 11–63 every other odd

Section 2.2: Read pp. 56–62, Work Exercises 1–11 odd, 15, 27–31 odd, 47, 49

Section 2.3: Read pp. 67–74, Work Exercises 1–27 odd, 35, 37, 43, 45, 51, 55, 61, 63

Section 2.4: Read pp. 81–84, Work Exercises 1, 3, 9–13 odd, 21–25 odd, 41, 45, 47

Section 2.5: Read pp. 91–98, Work Exercises 1–7, 9–37 every other odd, 49–65 every other odd

Section 2.6: Read pp. 103–108, Work Exercises 7–21 odd, 29–39 odd, 47–57 odd

Section 2.7: Read pp. 112–117, Work Exercises 1–3, 5–19 odd, 23–33 odd, 37–101 every other odd

Homework Set 2 Due with Exam 2 on Sept. 24

Section 3.1: Read pp. 136–143, Work Exercises 9–27 odd, 35–67 every other odd

Section 3.2: Read pp. 148–155, Work Exercises 1–31 odd, 39, 41–45 odd, 49–53 odd, 57, 63, 65, 71–75 odd, 85, 87

Section 3.3: Read pp. 161–169, Work Exercises 1, 3, 7–15, 19, 225, 37, 41, 45, 51, 67, 71, 87, 89

Section 3.4: Read pp. 175–179, Work Exercises 1–8 odd, 13, 17, 21, 23, 35

Section 3.5: Read pp. 181–187, Work Exercises 3, 9, 11, 19, 21, 23, 27–33 odd, 37, 51, 57

Section 3.6: Read pp. 190–193, Work Exercises 1–5 odd, 9–17 odd, 23, 29, 31, 37, 43, 45, 49, 57, 61

Homework Set 3 Due with Exam 3 on Oct. 10

Section 4.1: Read pp. 210–219, Work Exercises 1–7, 9, 11, 15, 19–23 odd, 33–37 odd, 41–47 odd, 51–55 odd, 61, 63, 69, 73, 79

Section 4.2: Read pp. 226–231, Work Exercises 1, 3, 7, 9, 15, 21, 25, 33, 41

Section 4.3: Read pp. 233–240, Work Exercises 1, 3, 11, 13–19 odd, 23, 29, 33, 41, 47 (Challenge)

Section 4.4: Read pp. 247–251, Work Exercises 1–17 odd, 19, 23

Appendix A: Read pp. 715–720, Work Exercises 1–15 odd, 21, 27

Homework Set 4 Due with Exam 4 on Oct. 24

Section 5.1: Read pp. 264–273, Work Exercises 1–113 odd, 133–147 odd, 161, 165

Section 5.2: Read pp. 278–281, Work Exercises 1–85 odd

Section 5.3: Read pp. 284–290, Work Exercises 1–5 odd, 13–31 odd, 35–47 odd, 53

Section 5.4: Read pp. 293–298, Work Exercises 1–39 odd, 43–67 odd, 75, 83, 97, 101, 113–123 odd

Section 5.5: Read pp. 302–306, Work Exercises 1–5, 7, 9, 13–21 odd, 27–31 odd, 35, 45, 51, 57, 61, 71, 73

Appendix B: Read pp. 723–725, Work Exercises 1–15 odd, 25, 29

Homework Set 5 Due with Exam 5 on Nov. 5

Section 6.1: Read pp. 320–324, Work Exercises 1–33 odd, 39–57 odd, 65

Section 6.2: Read pp. 326–331, Work Exercises 1–19 odd, 23, 25, 39–43 odd, 49, 53, 59, 61

Section 6.3: Read pp. 333–337, Work Exercises 1–3, 6, 7–37 odd, 41–45 odd, 49, 51, 59

Section 6.4: Read pp. 339–342, Work Exercises 1–69 every other odd

Section 6.5: Read pp. 343–349, Work Exercises 1–3, 5–31 odd, 39–43 odd, 55–61 odd

Homework Set 6 Due with Exam 6 on Nov. 19

Section 7.1: Read pp. 362–368, Work Exercises 1–37 odd, 45, 49, 51–57 odd, 61–89 every other odd

Section 7.2: Read pp. 371–377, Work Exercises 1–25 odd, 29, 31, 43–83 every other odd

Section 7.3: Read pp. 380–384, Work Exercises 1–23 odd, 35, 37

Section 7.4: Read pp. 386–391, Work Exercises 1–5 odd, 11, 17–33 every other odd, 41, 49, 51, 57

Section 7.5: Read pp. 396–402, Work Exercises 1–4, 5–15 odd, 23, 25, 29, 33, 35, 37, 41, 49, 53–59 odd

Section 7.6: Read pp. 407–412, Work Exercises 1–23 odd, 27–47 odd

Homework Set 7 Submit with Final Exam on Dec. 10 for up to 10 points Extra Credit

Section 8.1: Read pp. 428–432, Work Exercises 1–37 odd, 41, 43, 49–75 odd, 87

Section 8.2: Read pp. 435–431, Work Exercises 1–10, 11–57 odd, 61–73 odd, 83, 85, 91, 95, 105

Section 8.3: Read pp. 443–450, Work Exercises 1–49 odd, 55, 63–75 odd, 107, 109, 113, 115

Section 8.4: Read pp. 453–455, Work Exercises 1–19 odd, 25, 39–45 odd, 55

Section 8.5: Read pp. 458–463, Work Exercises 1–17 odd, 23, 31, 43–59 odd, 69, 83, 85, 91, 93

Section 8.6: Read pp. 468–472, Work Exercises 1–25 odd, 37, 43, 63, 65

Section 8.7: Read pp. 474–479, Work Exercises 1–21 odd, 29–37 odd, 43–51 odd, 55, 57, 63–69 odd, 75, 77, 81

Institutional SLOs—Student Learning Outcomes

A.) Critical Thinking: Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.

C.) Quantitative Reasoning: Identify, analyze, and solve problems that are quantitative in nature

F.) Technical Competence: Utilize the appropriate technology effectively for informational, academic, personal, and professional needs.

Program SLOs

1.) Apply quantitative thinking processes using basic mathematical operations to solve common academic, workplace, and family problems. (Theme: mathematical operations)

3.) Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)

5.) Select appropriate math strategies for solving and handling real life problems involving finance, economics, and family issues. (Theme: mathematical problem-solving)

Course SLOs

1. Solve using appropriate techniques: linear equations; equations involving rational expressions or absolute value; equations involving factorable polynomials; and systems of two or three linear equations

2. Graph and analyze linear, polynomial and rational functions using algebraic techniques; graph solution sets of linear and non-linear inequalities in one and two variables

3. Analyze, model, and solve applications ("story" problems) within the scope of the above

Specific Learning Objectives: (Exiting Skills for Math 127)

Upon completion of this course, the student should be able to solve problems, define terms, and explain concepts of the following subjects, and concepts:

1. Real number system

2. Operations on rational numbers

3. Variable expressions

4. Translating verbal expressions to variable expressions

5. First degree equations and inequalities, including applications

6. Absolute value equations and inequalities

7. Rectangular coordinate system

8. Concept of function, and graphing functions

9. Linear functions

10. Slope of straight lines, and finding equations of lines

11. Parallel and perpendicular lines

12. Inequalities in two variables
13. Solving systems of linear equations by graphing, substitution, or addition methods
14. Solving systems of linear equations using matrices and determinants
15. Applications problems in two variables
16. Polynomials, addition, subtraction, multiplication, and division
17. Factoring of polynomials
18. Rational exponents and radical expressions
19. Introduction to rational expressions
20. Operations on rational expressions
21. Complex fractions
22. Solving equations with rational expressions
23. Proportions and variation
24. Literal equations
25. Solving quadratic equations by factoring, completing the square, and by using the quadratic formula.

Entry Skills for Math 127

1. Operations with integers and rational numbers.
2. Exponents and the order of operations agreement.
3. Evaluation and simplifying variable expressions.
4. Translating verbal expressions into variable expressions.
5. Solution of general equations.
6. Solutions of inequalities.
7. Translating sentences into equations.
8. Integer, coin, stamp, geometry problems.
9. Markup and discount problems
10. Investment, mixture, uniform motion problems.
11. The rectangular coordinate system.
12. Graphs, slopes, equations of straight lines.
13. Functions
14. Graphing linear inequalities.
15. Solving systems of linear equations by graphing, substitution, and addition methods.
16. Application problems in two variables
17. Addition, subtraction, multiplication, division of monomials and polynomials.
18. Factoring polynomials
19. Addition, subtraction, multiplication, and division of algebraic fractions.
20. Complex fractions
21. Equations containing fractions
22. Literal equations
23. Application problems
24. Introduction to radical expressions.
25. Addition, subtraction, multiplication and division of radical expressions.
26. Solving equations containing radical expressions.
27. Solving quadratic equations by factoring, square roots, completing the square, and the quadratic formula.
28. Graphing quadratic equations in two variables.