

**Anoka Ramsey Community College Coon Rapids Campus**  
**Syllabus: MATH 0200 02, Fall 2008**  
**Mathematics I, 5 credits**

**Instructor:** Sarah Sponholz

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**Phone:** (763) 433-1394

**Office hours:** Monday-Thursday: 8:30-9:00

Monday/Wednesday/Thursday: 11-12

and by appointment(**stop by ANYTIME**)

**Class Times:** 0200.03 Monday-Friday, 10-10:50, B08

**Text:** Introductory Algebra for College Students, fifth edition, by Robert Blitzer  
Algebra and Geometry Shed Light on Each Other, by Barbara Brown.

**Prerequisite:** MATH 0100 with a grade of C or better, appropriate score on math placement test, or equivalent.

**Supplies:** Two notebooks, one for homework and one for class notes(or a three-ring binder). A folder, graph paper, colored pencils/pens, ruler, and a calculator. Note: Calculators will be allowed on homework, but not on exams, unless told otherwise.

**Catalog Description:** Introduction to the basic ideas of algebra and geometry. Topics include properties of the real number system; arithmetic of signed numbers; simplifying and factoring algebraic expressions; operations on polynomial, radical, and rational expressions; methods for solving linear equations, proportions and quadratic equations; applications of these equations; methods for solving linear inequalities; and graphing basic equations in two variables. Also included is a study of angle relationships; parallel lines; properties of triangles, circles and quadrilaterals; and similarity. This course is designed for persons who have good arithmetic skills but have had no high school algebra.

**Attendance and Responsibilities:** For success in Mathematics I, students should attend all classes and arrive on time! A student must notify the instructor ahead of time (as soon as the conflict is apparent, but at least one week ahead is expected) if he/she must miss a required exam. An exam or assignment missed without the instructor's permission will typically result in a score of zero. It is the student's responsibility to keep up with what happens in class each day (material covered, assignments given, etc). Students are expected to read the text, study examples, and work problems concurrently with the sections covered in class. Any cheating or plagiarism will result in a zero for that work and a possible meeting with the dean. Last but not least, **ASK QUESTIONS!!!!**

**Homework:** Homework will be assigned with each section covered in class. Homework will be checked on Math XL. This will be explained further on 9/3/08. Make sure you can make it to class on that day. If you can't, see Sarah ASAP.

**Exams:** There will be eight 75 point exams during the fall session and one final exam. If you cannot take the exam on the scheduled day, be sure to see me and we can make arrangements for you to take the test **before** the scheduled day. If you cannot take the exam on or before the test day (car problems, ill, ...), all is not lost. You **cannot** make up the exam, but I will replace the missed exam with half of your final exam score. This can only be used for one exam. Other missed exams will result in a zero. For those of you that do not miss any exams, I will replace your lowest exam score with half of your final exam score (assuming your final exam is not your lowest score).

The final exam is worth 150 points and will be on December 15<sup>th</sup>, 9:40-11:40

**Generally, students will score higher on quizzes and exams if they work more problems.**

**Quizzes:** A few quizzes may be given over the semester.

<b>Grades:</b>	Exams:	≈ 600
	Homework:	≈ 150
	Quizzes:	≈ 20
	<u>Final Exam:</u>	<u>≈ 150</u>
	Total:	≈ 900

Grades will be based on the following percentages: 90-100 A, 80-89 B, 70-79 C, below 70% NC.

**Help:** If you have questions or need help on class material there are three places you can go for free:

- 1-instructor
- 2-classmates
- 3-academic support center

**Pass/No Credit:** If you wish to take this course on a pass/no credit basis, you must inform me in writing by December 4th. Passing is 70% or better. Be sure to check with your counselor first.

**Incomplete:** No incomplete will be considered unless you are doing C or above work, have completed more than half the course, and have missed class because of unavoidable circumstances (e.g. hospitalization).

**Add/Drop/Withdraw:** The last day to add a class is August 31st. Please see your Student Handbook for more details.

**Accommodations for Students with Special Needs:** Anoka Ramsey Community College does not discriminate on the basis of race, color, national origin, gender sexual orientation, religion, age or disability in employment or in the provision of our services. Within the first week of class, students with special needs that require

accommodations should contact the Director of Access Services at (763) 422-3459 to discuss possible support services.

**Learner Outcomes:** At the conclusion of the course, the student should be able to:

1. simplify numerical and algebraic expressions involving the operations of addition, subtraction, multiplication, and division of real numbers and the order of operations.
2. simplify and/or evaluate an algebraic expression utilizing order of operations, including exponentiation, along with Commutative, Associative, and Distributive Properties.
3. solve first-degree equations.
4. utilize first-degree equations to solve application problems.
5. express numbers using scientific or standard notation.
6. perform the operations of addition, subtraction, and multiplication with polynomials.
7. completely factor polynomial expressions, not including sum and difference of cubes.
8. perform multiplication and division with rational expressions.
9. perform addition and subtraction on rational expressions with a common denominator.
10. solve proportions.
11. solve literal equations.
12. sketch the graph of a linear equation in two variables on a rectangular coordinate plane using the x- and y-intercepts and/or other ordered pairs.
13. sketch the graph of a line satisfying given conditions involving ordered pairs and/or slope.
14. write the equation of a line given the slope and the y-intercept.
15. simplify radical expressions involving square root and use the simplest radical form or decimal form to express answers.
16. solve quadratic equations by using the factoring method and the square root method.
17. identify types of angles (acute, obtuse, right, supplementary, complementary) and be able to use relationships involving the angles in problem solving.
18. classify triangles (using lengths of sides or measures of angles) and use related properties in problem solving.
19. find the area and perimeter of triangles and quadrilaterals and find the circumference and area of circles.
20. identify similar triangles and use related properties in problem solving.
21. identify simple polygons.
22. utilize the Pythagorean Theorem in problem solving.
23. solve a first-degree inequality in one variable and graph the solution on a number line graph.
24. utilize the relationship of angles created by parallel lines cut by a transversal in problem solving.
25. classify quadrilaterals and use related properties in problem solving.