Parametric Cartesian equation:

\[ x = (a - b) \cos(t) + c \cos((a/b - 1)t), \]
\[ y = (a - b) \sin(t) - c \sin((a/b - 1)t) \]

**Prerequisite:** The prerequisite for Math 100 is completion of Math 820 with a grade of “C” or better, or a qualifying score on the Math Competency Exam (MCE).

**Course Description:** Designed to prepare students for Intermediate Algebra. Elementary Algebra teaches simplifying algebraic expressions involving polynomials and rational terms; factoring; solving linear equations; solving quadratic equations using factoring; analyzing graphs of linear equations; and solving applied problems. This course will also include an introduction to algebraic operations with rational expressions.

**Course Objectives:** At the end of this course you should be able to (1) evaluate and simplify algebraic expressions using the rules of exponents, order of operations, combining like terms, and the distributive property; (2) add, subtract, multiply and divide using either monomials or polynomials; (3) solve a linear equation or inequality and check the solution; (4) analyze verbal problems, model with appropriate equations, substitute the known values, solve the resulting equations, and interpret the result in the context of the problem; (5) factor polynomials; (6) simplify, multiply and divide rational expressions; (7) graph first degree equations in two variables; (8) write an equation for a given line, identify the slope of a line; and (9) solve quadratic equations by factoring.


**Calculators:** Although calculators will not be allowed on some tests, the use of a scientific, or graphing calculator is strongly recommended. In general, the Math Department recommends the TI-83, or TI-83 Plus.

**Course Evaluation and Grading:** Your course grade will be based on the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Participation and Attendance</td>
<td>90 pts</td>
</tr>
<tr>
<td>Homework</td>
<td>160 pts</td>
</tr>
<tr>
<td>Quizzes</td>
<td>540 pts</td>
</tr>
<tr>
<td>Final Exam</td>
<td>210 pts</td>
</tr>
</tbody>
</table>

A = 895 - 1000
B = 790 - 894
C = 675 - 789
D = 550 - 674
F = below 549

In addition to homework, there will be 4-6 quizzes, and a Final Exam. If for ANY reason, you must miss class on the day of a quiz or exam, you MUST make arrangements with me IN ADVANCE for taking the test at some other time. It is your responsibility to make the necessary arrangements beforehand. Make-up tests may not be given for full credit.

*****The final exam date is Thursday, May 22nd, starting at 10:30am.*****
Participation and Attendance: In order to get the most out of this course, plan to attend each class regularly, arrive on time, and stay for the entire period. Since attendance is mandatory, you will be dropped after the fourth absence. Re-enrollment (which may occur once) is possible, but you must discuss it with me first. Again, attendance is your responsibility as are its consequences.

It is your obligation, as well as your responsibility, to participate in class discussions and in-class assignments. I encourage everyone to be active learners; this means you ask questions in class whenever you do not understand something. In addition, I am available for individual assistance during my scheduled office hours, or by appointment. I advise you to get to know your classmates and to work in groups, if possible. PLEASE NOTE: 9% of the final grade is determined by class participation and attendance. I will take the following issues into consideration:

- Your ability to answer questions on assigned readings
- Your ability to successfully work in small groups
- Your ability to offer insight to questions asked by fellow classmates
- Your ability to be on time to class
- Your ability to leave food or drinks outside the classroom
- Your ability to turn in assignments on time
- Your ability to maintain a positive and supportive attitude

School Holidays: February 15th-18th and March 17th – 22nd (Spring Break).

Homework: Homework assignments will be given in class and will be checked/graded regularly. I expect assignments to be legible, neatly organized, and worked using 3 colors. (I will explain this in class). Some homework problems will be discussed during class, especially those that may have caused you particular difficulty. PLEASE NOTE: 16% of your final grade is based on your homework scores. Late homework will not be accepted.

Office Hours: My office hours are meant for you. If your schedule conflicts with mine, see me in class to make an appointment. I will hold the following scheduled office hours:

- Mondays & Wednesdays: 10:30-11:00am
- Tuesdays: 3:30-4:00pm & Thursdays: 12:30-1:00pm

Accommodation of Disability: Students with verified disabilities who need academic accommodations should discuss options with me during the first two weeks of class. Please contact me and/or the Disabled Students Program and Services (DSP&S) Office for further information.

Academic Integrity and Classroom Behavior: This class will be conducted in accordance with MiraCosta College’s policy on “Rights and Responsibilities of Students and Staff Members,” and basic standards of academic honesty. Cheating, plagiarism, or other forms of academic dishonesty are not acceptable and will not be tolerated. Students are expected to respect and obey standards of student conduct while in class, or on the campus. Charges of misconduct and disciplinary sanctions may be imposed upon those who violate these standards of conduct, or provisions of college regulations.

*** Cellular-Phone and Pager Use Policy ***:

- If you carry a “pager” and/or a cell phone, turn them/it OFF, or set them/it to “Vibrating Mode” while in class.
- Disrupting the learning environment with use of cellular-phones and/or pagers can lead to being dropped from the class.

Drops: If you decide to drop the course, put in a Drop Card yourself. Don’t wait for me to drop you automatically. Withdraw W’s will be issued between February 2nd and April 24th. If I drop you and you want to be reinstated, see me quickly.

I look forward to getting to know each of you. Good luck, enjoy the course, and have a great semester!