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## M 065.02: Prealgebra

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**Instructor:** Steven Phillips

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**Office:** Math 301

**Text:** MyLabsPlus eText (online access included with course)

\*Printed copy optional (order at UM Bookstore)

**Tutoring:** Math Technology Learning Center, Missoula College, Room 230

**WELCOME TO PREALGEBRA! M065** is the first step on a journey of mathematical discovery, created to offer you a positive learning experience as we lay the foundation for understanding the principles and techniques of algebra. M065 is a one-semester course, covering the arithmetic and basic algebra skills needed for Introductory Algebra, M090. Topics include: different subsets of the number system; fractions, decimals and percentages with applications, ratios and proportions with applications; linear equations with applications; and an introduction to graphing.

**PLACEMENT** in M065 should reflect your score on the math placement test (Maplesoft). This course is a “developmental course,” designed to help you prepare for college level coursework. Developmental course credits do not count towards graduation or affect your GPA, but these credits do count for financial aid, Four Bear progress, the tuition flat-spot, and toward full- or part-time status. All developmental course grades carry an “R” designation.

\*Be certain that you are enrolled in the proper math class at the beginning of the semester. You may not be able to switch into a more appropriate class after the first week. If you have any concerns about your placement see your instructor immediately.

**WHY DO WE STUDY ALGEBRA?** Algebra allows us to solve problems for unknown quantities, draw graphs of relationships between numbers, and make use of the inherent structure of our number system, but the larger and more important goal in this course is to learn abstract reasoning. This deeper thinking allows us to draw from our mental toolboxes to solve certain types of problems.

This course has been designed for you, the student. Your willing participation is essential if you plan to succeed in this course. Please come to class on time and ready to take notes. If we can have a motivated, friendly, and enthusiastic class, we will be able to try new things and have a good time while we all learn together. Regular practice outside of class is also essential to learning new skills and concepts. No matter how you feel about studying math, it is important to learn personal responsibility and develop a solid work ethic.

**MyLabsPlus Online Course Materials:** This course utilizes an innovative online learning system called MyLabsPlus. This includes your online textbook, assignments, and many resources to support your learning. To access your course materials, click on the “MyLabsPlus” icon at [my.umt.edu](http://my.umt.edu). Login with your UM NetID.

**MTLC:** The Mathematics Technology Learning Center (MTLC) is a large classroom filled with computers where students can work on homework, receive one-on-one math tutoring, and retake tests to prove their mastery of the course content.

**Successful Students:**

- **Attend Class**
- **Study eBook, Take Notes, Watch Videos & Ask For Instructor Help**
- **Work through the Homework**
- **Come prepared for Tests**

**LEARNING GOALS:** Upon completion of this course, students will be able to:

- To manipulate integers and rational numbers arithmetically
- To use the order of operations to simplify arithmetic and algebraic expressions
- To simplify single variable linear expressions by combining like terms
- To solve linear equations and their applications
- To manipulate percentages and solve applied percentage problems
- To manipulate ratios and proportions and solve applied ratio and proportion problems
- To graph lines in the rectangular coordinate system

### **COURSE STRUCTURE & EXPECTATIONS**

**COURSE DESIGN:** M065 is broken into five Units, each of which includes Homework and a Mastery Test to support and demonstrate your mastery of the course content.

- **Pre-assessments:** Each Unit includes an optional Pre-Assessment. These may be taken at the beginning of a Unit to test your knowledge and potentially earn mastery points for concepts and skills you have already mastered. This will not affect your grade or clear your homework, but it may shorten your homework by allowing you to skip ahead to more advanced topics.
- **Homework:** The homework provides sets of practice problems and linked quizzes for each skill covered in the Unit. Completing practice problems will help you develop your understanding of each lesson and prepare for quizzes. **You do not need to do every single practice problem!** When you feel you are ready, take the quiz-me. You must pass the quiz-me with a 75% to master the objective. If you do not pass, ask for help, read an example again, or consult your notes. Then complete at least one additional practice problem to reload the quiz-me. **You do not need to do each practice problem again!** You must earn the required number of “mastery points” for the Unit to complete the homework and proceed to the Unit Pre-test.
- **Mastery Test:** The Unit Mastery Test is a traditional paper and pencil exam that will be proctored during regular course meetings. When circumstances prevent you from taking a test at the scheduled time, contact me PRIOR to the time of the test to announce your absence. Absences are excused only for reasons of illness, injury, family emergency, or a University-sponsored activity. Arrangements for a make-up exam must occur within one week of the scheduled exam date. Failure to arrange a make-up exam within a week of the scheduled exam date will result in a score of zero for the exam. You are not allowed to use a cellphone or access other websites or apps during a Mastery Test. **\*You may use a calculator and a single page of notes (8.5"x11").**
  - You may retake a Mastery Test once if you have completed at least 90% of the learning objectives for the unit AND either took the Mastery Test on time or had an excused make-up test.

**EXTRA CREDIT—MATH NOTEBOOK:** Students in this course are encouraged to keep a notebook to record class notes, examples and practice work. This will help you organize your notes and practice work into a study guide and remember what you are learning. The notebook is also helpful for reviewing your work on problems, especially when you get stuck or have questions. Developing a well-organized approach to learning new concepts and skills will help you achieve mastery in mathematics as well as other subjects, which will make your entire college experience more rewarding. Your notebook will be checked by your instructor when you take the Unit Mastery Test.

The points for each notebook check will be given if the following conditions are met:

- Organization: Chapter sections and topics are clearly labeled
- Math Definitions and Illustrations: Vocabulary and drawings that explain the concepts
- Example Problems: Examples from the book, videos or instructor help
- Work problems: Shows work on practice problems from homework

**EXTRA CREDIT—ATTENDANCE & PARTICIPATION:** Regular attendance and participation are strongly encouraged in this course.

**REASONABLE ACCOMMODATIONS:** Students with disabilities may request reasonable course modifications. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). For more information, please consult <http://www.umt.edu/dss/>. Examples of reasonable accommodations include extra time or use of a quiet room for tests and/or quizzes. To qualify for reasonable accommodations you must provide a letter from DSS.

You are responsible for making the necessary arrangements with DSS at the Mountain Campus or the Missoula College campus. If you have any questions, please contact me.

**DUE DATES & EXTENSIONS:** You must finish the Unit Pre-Assessments by the specified due dates. These dates are posted in MyLabsPlus.

**CALCULATOR:** A scientific calculator is required for M065; the Department of Applied Arts and Sciences recommends one of the Texas Instruments models, such as TI-30 or TI-34. They are inexpensive and offer a good introduction to the utility of calculators. There is also a TI-84 calculator available on your computer desktop in the MTLC.

**TUTORING:** Math tutoring is available for all UM students. In addition to the tutoring provided at the MTLC (MC room 230), additional tutoring is available on both campuses. Check for hours at the Missoula College Learning Center (MC room 022; 243-7826; <http://mc.umt.edu/learning-center/Tutoring/default.php>), or for tutoring on the Mountain Campus see: <http://hs.umt.edu/math/undergraduate/all-students/free-tutoring.php>.

**FINAL GRADES:** Our approach to learning mathematics is based on the concept of mastery. Since we require a minimum mastery level of 75% or better for each of the course components and Units, successful mastery of all five Units will result in a passing grade (75% = RC). While a traditional algebra course may offer more points for homework and quizzes, this course builds these into the study plan that helps you achieve mastery on the Pre-Tests and Exams. For this reason, your study plan will have a lower point value than you may have encountered in previous math courses. The real goal is to master the material!

Final grades will be computed using the following weights:

- Mastery Tests: 60%
- Homework 40%

Students must complete M065 with a RC- or better to advance to their next math course.

Letter grades correspond to numerical scores (as shown in MyLabsPlus) according to this plan:

RF	RD	RC	RB	RA
Below 60%	60-69%	70-79%	80-89%	90-100%

**GRADE OPTION:** M065 can be taken for a traditional letter grade only. M065 cannot be audited or taken credit/no credit.

**PETITION TO DROP:** Petitions for dropping will be considered only for students who provide written verification of at least one university approved reason:

1. Error in registration
2. Family emergency
3. Accident or illness
4. Change in work schedule

Reasons that are not acceptable include:

1. Forgetting to turn in a drop slip
2. Protecting a student's GPA

**INCOMPLETES:** A grade of incomplete will only be considered when all three of the following are true:

1. The student has been in regular attendance and passing up to three weeks before the end of the academic semester.
2. Factors beyond the student's control make it impossible to complete the course on time.
3. The instructor and the student agree that there is a reasonable probability that the student will be able to make-up the work required to complete the course and specific arrangements are drawn up and signed by both. A student who receives an incomplete has one calendar year to resolve the incomplete (I) before it automatically reverts to a failing grade (RF).

**ACADEMIC CONDUCT:** All students are expected to practice academic honesty as defined by the Student Conduct Code, available at [http://www.umt.edu/vpsa/policies/student\\_conduct.php](http://www.umt.edu/vpsa/policies/student_conduct.php). Academic misconduct is subject to an academic penalty by the instructor and a disciplinary sanction by the university.

**UNIVERSITY OF MONTANA ATTENDANCE POLICY:** Students who are registered for a course but do not attend the first two class meetings may be required by the instructor to drop the course. This rule allows for early identification of class vacancies to permit other students to add classes. Students not allowed to remain must complete a drop form or drop the course on the internet (<http://cyberbear.umt.edu>) to avoid receiving a failing grade. Students who know they will be absent should contact the instructor in advance.

Students are expected to attend all class meetings and complete all assignments for courses in which they are enrolled. Instructors may excuse brief and occasional absences for reasons of illness, injury, family emergency, or participation in a University sponsored activity. (University sponsored activities include for example, field trips, ASUM service, music or drama performances, and intercollegiate athletics.) Instructors shall excuse absences for reasons of military service or mandatory public service.