**Catalog Description:** 1 Credits (1 hr. lab) A non-course based option designed for students who need to master a subset of the prerequisite learning outcomes. Topics may include basic arithmetic operations on integers and rational numbers, order of operations, introduction to basic geometric concepts, simplification of algebraic expressions and techniques of solving simple linear equations. This course carries institutional credit but will not transfer and will not meet degree requirements. (3201045519) Prerequisite: Placement by Testing Corequisite: [MATH 0308](http://catalog.lonestar.edu/content.php?filter%5B27%5D=MATH&filter%5B29%5D=0106&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=27&expand=&navoid=11560&search_database=Filter#tt5936)

**Course Outcomes:**  Upon completion of this course the student will

1. Define, represent, and perform operations on real numbers, applying reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.

• Demonstrate skills in computations, estimations, order of operations and applications involving rational numbers. (ABE Level 5)

• Demonstrate skills in computations, estimations, order of operations, and applications involving integers. (ABE Level 5)

• Demonstrate skill using the Commutative, Associative, Distributive, and Identity Properties of Addition and Multiplication on algebraic expressions. (ABE Level 5)

2. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.

3. Solve linear equations in one variable. (ABE Level 5)

4. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.

5. Use graphs, tables, and technology to analyze, interpret, and compare data sets.

6. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions.

7. Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.

**Contact and Credit Hours:**

* Credit Hours: 1
* Lab Hours: 1
* Total Contact Hours: 16

**Prerequisites:** Placement with test scores in the following range:

* TSI ASSESSMENT: 310- 335 with an ABE 4

**Required Material for Student** MyLab Math with Pearson eText -- Standalone Access Card -- for Beginning & Intermediate Algebra and College Algebra: A Corequisite Solution, 1/e 24 Month **ISBN: 9780135268599** (use only in 0106, 0308 or 0314)

**\*Please let students know that MyMathLab (MML) access must be purchased either online at** [**www.mymathlab.com**](http://www.mymathlab.com)**, or at the bookstore on the Lone Star College – Cy Fair or at the Fairbanks Center or Cypress Center campuses, or at Text Express across the street from the Lone Star College-Cy Fair campus. MyMathLab purchased at** [**www.amazon.com**](http://www.amazon.com) **and other online sites will not work, as it has a different ISBN than mentioned above and because we have a custom textbook.**

Allowed calculators:  TI-83, TI- 83 Plus, TI-83 Silver Edition, TI-84, TI-84 Plus or TI-84 Silver Edition.

**Optional Materials for Student   
or Reference Texts:** Lial, Hornsby, & McGinnis; *Beginning & Intermediate Algebra,6th Edition* (publisher: Pearson); Package: Textbook + MML Access Code, ISBN \_9780135266724

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| **Textbook: sections from Prealgebra, Lial Hestwood**  Study Skills  These skills will be beneficial to the student’s learning in both courses. Please feel free to supplement with any other study skill that you have experienced as successfully in other math courses   1.8 – Managing Your Time 2.5 – Tips for Taking Math Test  Other Study Skills Sections available in textbook:  Homework: How, Why, and When  Taking Lecture Notes  Using Study Cards  Tips for Taking Math Test  Tips for Improving Test Scores  Preparing for Your final Exam  Variables  2.1 – Introduction to Variables  2.5- Solving Equations with Several Steps  Fractions  4.1 – Introduction to Signed Fractions  4.2- Writing Fractions in Lowest Terms  4.3 – Adding and Subtracting Fractions  4.4 – Multiplying and Dividing Fractions  Decimals  5.1 – Reading and writing decimals  5.2 – Rounding Decimal Numbers  5.3 – Adding and Subtracting Signed Decimals  5.4- Multiplying Signed Decimals  Proportion  6.3 - Proportion 7.2 – The Percent Proportion | Number Line  1.2 – Introduction to Integers   Graphs  9.4 – The Rectangular Coordinate System  9.5 – Introduction to Graphing Linear Equations  Exponents  10.1 – The Product Rule and Power Rules for Exponents  10.2 – Integer Exponents and the Quotient Rule  Multiplying Polynomials  10.5 – Multiplying Polynomials: An Introduction  Factoring  5.1 – Greatest Common Factor; Factor By Grouping |