



*Math Center Bridge to
College Mathematics
NBASC-901
A Just in Time Review*



**PALOMAR
COLLEGE**
Mathematics
Learning Center

Student Handbook
Spring 2023

MyLab | Math

Student Registration Instructions for Canvas

- ✚ Go to <https://mlm.pearson.com/enrollment/towfiq62228>
- ✚ Sign in with your Pearson student account or follow the instructions for student registration and create your account.
- ✚ If you are not familiar with Pearson MyLab, please click on the following link and watch the video that explains the student registration process: [How to Register for Your Pearson MyLab Course](#)
- ✚ When you are asked to choose the access options, choose the 14-day temporary access. (Details in about 1:20 mark of this video)
- ✚ If you are not done with the review during the temporary access period, please consult with the Math Center staff on your options.

If you contact Pearson Support, give them the course ID: towfiq14593

To sign in later:

1. Go to <https://mlm.pearson.com>
2. Sign in with the same Pearson account you used before.
3. Select _____ from My Courses.

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What Topics Do You need to Review?

- ✚ This course contains review material for most math courses offered at Palomar College.
- ✚ Schedule a meeting with the Math Center staff so that we can help you narrow down the topics you need review on.

Mathematics Learning Center

Palomar College is dedicated to serving the needs of a wide variety of students by offering many alternative learning opportunities. One is the Hybrid Course offered through the Mathematics Center. The Mathematics Center offers College Algebra, Trigonometry and Calculus for Business and Social Sciences courses in a Hybrid format. The Hybrid format offers students the opportunity to complete a mathematics course in less than one semester or to finish two courses in a semester. In addition, the Center offers just in time review of selected topics or a comprehensive review of all topics in remedial mathematics through the Math Center Bridge to College Mathematics program. Students may review any or all of the topics in prealgebra, elementary algebra, intermediate algebra, basic statistics, or basic geometry.

<i>Location</i>	In person help in Room MC-1 at the main campus in San Marcos Virtual help via zoom: https://palomar-edu.zoom.us/j/93713198344	
<i>Telephone</i>	(760) 744-1150, Ext. 2718 <i>Note: We encourage that use the email to communicate with us instead of phone calls.</i>	
<i>Web Page</i>	https://www2.palomar.edu/pages/math/mlc/	
<i>Center Hours (In person help)</i>	Monday – Thursday 8:00 am – 8:00 pm Friday 8:00 am – 2:00 pm Saturday 9:00 am – 12:00 pm	
<i>Center Hours (Online Tutoring)</i>	Monday – Thursday 8:00 am – 8:00 pm Friday 8:00 am – 2:00 pm Saturday 9:00 am – 12:00 pm	

Math Center Faculty & Tutors	Email	Phone Number
<u>Director & Instructor of Record</u> <i>Prof. Fari Towfiq</i>	ftowfiq@palomar.edu	(760) 744 1150, ext. 2718
<u>Tutors</u>	<i>Schedules for the instructors on duty and the tutors will be posted on the Math Center website</i>	
<u>Instructors on Duty</u>	https://www2.palomar.edu/pages/math/mlc/	

For security and privacy reasons, students must use their Palomar Student email account when communicating with the instructors or requesting help in the course. Otherwise, you may not receive help.

<u>Highlights</u>	Open Entry/Open Exit Course
	Grading – Pass/No Pass
	Students may be referred by an instructor or a counselor or students may refer themselves
	Self-paced format with a clear structure
<u>Holidays</u>	Lincoln’s Day – February 17, 2023
	Non-instructional Day – February 18, 2023
	Washington’s Day – February 20, 2023
	Spring Break – March 27, 2023 to March 31, 2023
	Non-instructional Day – April 1, 2023

Aspects of Math Center Bridge to College Mathematics

- 1) Based on the referral, each student meets with an instructor or a tutor and prepare a plan of action to complete the review in a timely manner. Mostly the review topics are presented online. An instructor on duty or a tutor will be available in the math center to assist you and clear your doubts. The following will be made available for you to help your review:
 - a. Supplementary material, such as computer lessons/drill and practice, for topics is easily accessible on Pearsonmylabandmastering.com (PearsonMyLab).
 - b. Digital videos of the lessons are available to students on PearsonMyLab.
- 2) Each student will be given a timeline to complete the student's plan of action.

The time spent on this course will be comprised of:

- a. Watching the lecture-videos or example-videos.
 - b. Reading and learning from the multimedia e-Text
 - c. Doing Homework assignments
 - d. Asking for help from the instructor on duty, if needed.
 - e. Taking/Reviewing Practice Tests
- 3) Each student will master each learning objective in the plan according to the given timeline.
 - 4) Each student will meet with a tutor or instructor on a regular basis to make sure that the review is on track.

Required e-book package:

Basic Math, Introductory and Intermediate **Algebra 1st Edition** including the Access Code for Pearson MyLab
Author(s): Lial, Margaret | Hornsby, John | McGinnis, Terry | Salzman, Stanley | Hest wood, Diana
Textbook ISBN-13: 9780321980373

Calculator Requirements:

Scientific Calculator or Graphing Calculator (TI-84 Plus C Silver Edition) is required for this class.

Note: Students with vision impairment need to have talking calculator.

NBASC - 901 Topics

Study Skills Topics

1. Using Your Math Text
2. Reading Your Math Text
3. Taking Lecture Notes
4. Completing Your Homework
5. Using Study Cards
6. Managing Your Time
7. Reviewing a Chapter
8. Taking Math Tests
9. Analyzing Your Test Results
10. Preparing for Your Math Final

Remedial Mathematics Topics

- 1. Whole Numbers:** Reading and Writing Whole Numbers; Adding Whole Numbers; Subtracting Whole Numbers; Multiplying Whole Numbers; Dividing Whole Numbers; Long Division; Rounding Whole Numbers; Exponents, Roots, and Order of Operations; Reading Pictographs, Bar Graphs, and Line Graphs; Solving Application Problems
- 2. Multiplying and Dividing Fractions:** Basics of Fractions; Mixed Numbers; Factors; Writing a Fraction in Lowest Terms; Multiplying Fractions; Applications of Multiplication; Dividing Fractions; Multiplying and Dividing Mixed Numbers
- 3. Adding and Subtracting Fractions:** Adding and Subtracting Like Fractions; Least Common Multiples; Adding and Subtracting Unlike Fractions; Adding and Subtracting Mixed Numbers; Order Relations and the Order of Operations
- 4. Decimals:** Reading and Writing Decimal Numbers; Rounding Decimal Numbers; Adding and Subtracting Decimal Numbers; Multiplying Decimal Numbers; Dividing Decimal Numbers; Fractions and Decimals
- 5. Ratio and Proportion:** Ratios; Rates; Proportions; Solving Proportions; Solving Application Problems with Proportions
- 6. Percent:** Basics of Percent; Percent and Fractions; Using the Percent Proportion and Identifying the Components in a Percent Problem; Using Proportions to Solve Percent Problems; Using the Percent Equation; Solving Application Problems with Percent; Simple Interest; Compound Interest
- 7. Measurement:** Problem Solving with U.S. Measurement Units; The Metric System – Length, Capacity and Weight (Mass); Problem Solving with Metric Measurement; Conversions between Metric System measurements and U.S. Measurement
- 8. Geometry:** Basic Geometric Terms; Angles and Their Relationships; Rectangles and Squares; Parallelograms and Trapezoids; Triangles; Circles; Volume; Pythagorean Theorem; Similar Triangles
- 9. Introduction to Basic Algebra:** Signed Numbers; Adding and Subtracting Signed Numbers; Multiplying and Dividing Signed Numbers; Order of Operations; Evaluating Expressions and Formulas; Solving Equations; Solving Equations with Several Steps; Using Equations to Solve Application Problems
- 10. Statistics:** Circle Graphs; Bar Graphs and Line Graphs; Frequency Distributions and Histograms; Mean, Median, and Mode;
- 11. The Real Number System:** Exponents, Order of Operations, and Inequalities; Variables, Expressions, and Equations; Real Numbers and the Number Line; Adding Real Numbers; Subtracting Real Numbers; Multiplying and Dividing Real Numbers; Properties of Real Numbers; Simplifying Expressions
- 12. Equations, Inequalities, and Applications:** The Addition Property of Equality; The Multiplication Property of Equality; More on Solving Linear Equations; An Introduction to Applications of Linear Equations; Formulas and Additional Applications from Geometry; Ratio, Proportion, and Percent; Solving Linear Inequalities
- 13. Graphs of Linear Equations and Inequalities in Two Variables; Functions:** Linear Equations in Two Variables; The Rectangular Coordinate System; Graphing Linear Equations in Two Variables; The Slope of a Line; Writing and Graphing Equations of Lines; Graphing Linear Inequalities in Two Variables; Introduction to Relations and Functions; Function Notation and Linear Functions
- 14. Systems of Linear Equations and Inequalities:** Solving Systems of Linear Equations by Graphing; Solving Systems of Linear Equations by Substitution; Solving Systems of Linear Equations by Elimination; Applications of Linear Systems; Solving Systems of Linear Inequalities
- 15. Exponents and Polynomials:** Adding and Subtracting Polynomials; The Product Rule and Power Rules for Exponents; Multiplying Polynomials; Special Products; Integer Exponents and the Quotient Rule; Dividing a Polynomial by a Monomial; Dividing a Polynomial by a Polynomial; An Application of Exponents: Scientific Notation
- 16. Factoring and Applications:** Factors; The Greatest Common Factor; Factoring Trinomials; Factoring Trinomials by Grouping; Factoring Trinomials by Using the FOIL Method; Special Factoring Techniques; A General Approach to Factoring; Solving Quadratic Equations by Factoring; Applications of Quadratic Equations
- 17. Rational Expressions and Functions:** Rational Expressions and Functions; Multiplying and Dividing; Adding and Subtracting; Rational Expressions; Complex Fractions; Equations with Rational Expressions and Graphs; Applications of Rational Expressions; Variation
- 18. Equations, Inequalities, and Systems Revisited:** Review of Solving Linear Equations and Inequalities; Set Operations and Compound Inequalities; Absolute Value Equations and Inequalities; Review of Systems of Linear Equations in Two Variables; Systems of Linear Equations in Three Variables; Applications
- 19. Roots, Radicals, and Root Functions:** Radical Expressions and Graphs; Rational Exponents; Simplifying Radical Expressions; Adding and Subtracting Radical Expressions; Multiplying and Dividing Radical Expressions; Solving Equations with Radicals; Complex Numbers

20. **Quadratic Equations, Inequalities, and Functions:** Solving Quadratic Equations by the Square Root Property; Solving Quadratic Equations by Completing the Square; Solving Quadratic Equations by the Quadratic Formula; Equations Quadratic in Form; Formulas and Applications; Graphs of Quadratic Functions; More about Parabolas and Their Applications; Polynomial and Rational Inequalities
21. **Inverse, Exponential, and Logarithmic Functions:** Operations on Functions and Composition; Inverse Functions; Exponential Functions; Logarithmic Functions; Properties of Logarithms; Common and Natural Logarithms; Exponential and Logarithmic Equations and Their Applications
22. **Nonlinear Functions, Conic Sections, and Nonlinear Systems:** Additional Graphs of Functions; Operations and Composition; The Circle and the Ellipse; The Hyperbola and Other Functions Defined by Radicals; Nonlinear Systems of Equations; Second-Degree Inequalities and Systems of Inequalities
23. **Additional topics:** Inductive and Deductive Reasoning; Solving Systems of Linear Equations by Matrix Methods; Synthetic Division

How to Start Your Class *(Please read this section before working on MyMathLab)*

1. Follow the instruction on page 2 of this Handbook to register for PearsonMyLab.
2. The e-book is available on PearsonMyLab
3. Video lectures are available in PearsonMyLab.
4. Study Plan for each section contains practice problems and a quiz to check your mastery
5. Additional options are available, if needed.

Now let's get started with the review

- A. Login to PearsonMyLab
- B. Click on e-book and lecture videos on the left-hand side
- C. Click on the Chapter you need review on
- D. Click on the section you need review on
- E. Watch the lecture and exercise videos, as needed
- F. View the e-Text, as needed
- G. Do the homework
- H. Do the pre-test, review quiz and post test
- I. Do the Study Plan, if additional practice is needed