

General course information:

Math-M104: Foundations of College Algebra (3 credits)

Prerequisite: SSCI-S100: Strategies for Success in College Mathematics, C- or better, OR placement into this course.

This course assumes you have previously completed an introductory algebra class. Many of the skills you learned in that class will be reviewed in this course. If you have never taken an algebra course or if it has been a long time since you completed the class, you should talk to your academic advisor about options available to you for acquiring introductory algebra skills.

Course Description: Refer to [Appendix F](#) for a detailed list of topics

Students will develop critical problem solving skills, acquire an understanding of the core concept of functions and learn appropriate technology skills while strengthening their mastery of linear equations and inequalities, systems of linear equations, polynomial operations and graphing techniques for linear equations.

This course contributes to the fulfillment of the Quantitative Literacy Goal and the outcomes listed:

Students will translate a verbal problem into mathematical symbols.

Students will solve the mathematical problem that models the verbal problem.

Students will use the solution of the mathematical problem to draw valid conclusions about the verbal problem.

Required course materials (textbook, access code and calculator):

MyMathLab Student Access Kit (Access Code)

- Use of the website MyMathLab is required to complete and submit your homework and quizzes.
- To register at the website you must have the MyMathLab Access Code.
- Your instructor will provide the information on how and when to register with your MyMathLab code.
- Refer to the [Appendix A: Acquiring the MyMathLab Access Code](#) for detailed information about acquiring the MyMathLab access code. **PLEASE READ THIS BEFORE YOU PURCHASE THE TEXTBOOK / CODE!**

Textbook

- [Algebra for College Students](#), Robert Blitzer, **Eighth Edition (physical copy or online option)**
- The physical copy of the textbook is optional, but recommended. You will have access to the textbook through the MyMathLab website.
- Refer to [Appendix A: Acquiring the MyMathLab Access Code](#) for information about the online text option and purchase details. **PLEASE READ THIS BEFORE PURCHASING YOUR TEXTBOOK / CODE!**

Calculator Requirement

- You are required to have a TI-83, TI-83 Plus, TI-84 or TI-84 plus calculator for this course.
- A limited number of TI calculators are available for use in the Math Commons if you have not yet purchased your calculator. These calculators can be checked out for use in your class on an emergency basis.

Forbidden Materials

- You will NOT be permitted to use the TI-89 or the TI-Nspire CAS calculators, or any other calculator equipped with a computer algebra system (CAS).
- Use of CAS to **generate OR check answers** to course work is NOT permitted and is considered **cheating**.
- You will NOT be permitted to use any “math help” websites that uses a CAS or solves problems.
- Calculator APPS on your smart phone will NOT be allowed during in-class tests.
- Please refer to [Appendix E: Academic and Personal Conduct](#) for more information

M104 Course Websites

There are three different websites you will use over the course of this semester:

- MyMathLab: (www.pearsonmylabandmastering.com)
 - MyMathLab (MML) is used to complete MyMathLab homeworks and MyMathLab Quizzes
 - The MML gradebook contains your current class grade based on course work, exams, and Math Lab attendance.
- Canvas: (FA18: M104 Math Lab)
 - The Canvas Math Lab page is administered by the Math Lab Coordinator, Dr. Peter Tupa
 - This page's gradebook contains **only** your current Math Lab attendance score
 - This page contains many resources to help you study for exams and learn how to use MML
- Canvas: (FA18: FOUNDATIONS OF COLLEGE ALGEBRA: #####)
 - This page is administered by your course lecturer
 - The ##### will match your course CRN number
 - Announcements from your lecturer can be found here
 - Graded homeworks and Skills Practice sets can be found here by clicking on the **Assignments** tab

Grade component details

- All components of your Math-M104 grade will be posted in your MyMathLab gradebook.
- The gradebook in Canvas should not be used to determine your current course average.
- You must have a score of at least 60% on the final exam to earn a grade higher than D-.

MyMathLab Homework

- You will be assigned on online MyMathLab homework assignment after each class (except those immediately before your in-class tests).
- The online homework can be completed using any computer with a dependable internet connection.
- For most exercises you are given three tries to enter the correct answer.
 - After the third unsuccessful try at a question you will be given a new similar question. There is no limit to the number of new questions (3 tries each) you can attempt.
- If you do not attempt an online homework assignment before the due date, you will be assigned a score of 0 for the assignment. You will always have the option of going back and completing late homework for full credit.

MyMathLab Quizzes

- There will be twelve on-line quizzes during the semester.
- At the end of the semester, your two lowest quiz scores will be omitted, and the quiz average will be the average of your scores on your ten highest quizzes.
- You are permitted to make two attempts on each quiz, but if you make a second attempt it must be before the due date. The best score of the two attempts will be used for your grade. You are strongly encouraged to review your first attempt with a tutor before you make the second attempt.
- The work on the quiz should be yours alone. Please do not ask the lab tutors or your classmates for assistance.
- **To be able to access the quiz, you must achieve a score of 90% or higher on each of the homework assignments covered by the quiz. The start date/time of the quiz will be after the homework assignments covered on the quiz are both due.**
- There will be NO extensions on due dates for the quizzes without written medical or legal documentation. Plan your work accordingly.
- If you fail to complete a quiz on time, your score will be 0. NO EXCEPTIONS!
- Use the "MML Quizzes and Tests" link in the left navigation pane to open the assignment.

Graded Homework

- There will be 12 required paper and pencil exercise sets assigned and collected for a grade. The assignments and due dates will be posted through your Math-M104 Canvas site.
- At the end of the semester, your two lowest Graded Homework scores will be omitted.
- It is your responsibility to print, complete and submit each assignment on time. Be sure to DOWNLOAD the document before printing so all of the math symbols will display correctly.
- Graded homework assignments will NOT be accepted after the due date. If you are unable to attend class on the day it is due you should send your instructor a scanned copy of your work by email. The time stamp on the email should be no later than the start of your class meeting. You may also be asked to turn in your hard copy of the assignment no later than the start of the next class meeting.
- For each Graded Homework set posted, there will be similar exercises posted in the matching Skill Practice Set. You may ask the tutors in the IU Kokomo Math Commons to assist you as you complete these exercises.
- The work you submit for the Graded Homework must be yours alone. Collaboration with other students is **not permitted**.
- Use of computer algebra systems (CAS) to generate OR check answers to homework and quiz questions is NOT permitted and is considered cheating. This includes the use of the CAS provided in the TI-89 and TI-Nspire CAS calculators as well as the numerous “math help” websites.

Participation

- Your instructor may require you actively participate in class by answering questions, solving problems or engaging in group work activities.
- You will be expected to actively participate.
- Please be respectful of your peers and the learning environment.

Exams

- All tests are during class. Tests will be in the traditional paper and pencil format. The test problems will be similar to those in the on-line homework, strongly recommended textbook exercises, skill practice sets and graded homework assignments.
- You will be permitted to use a TI-83, TI-83 Plus, TI-84 or TI-84 plus calculator during the test.
- Calculators accessed through a mobile device (cell phone, tablet, etc.) will NOT be permitted.
- You may NOT use your book or any notes during the test.
- You should show your work clearly to allow for partial credit.
- The final is a two hour paper and pencil test that covers the entire semester.
- If your final exam score is greater than any of the three in-class midterm exams, your final exam grade will be used to replace the lowest of these midterm exam scores.

Exam make-up policy

- If you know that you cannot attend class when a test is scheduled, you should contact your instructor in writing (by email) at least two weeks in advance to make alternative arrangements for taking the test.
- If you miss a test with no advance notice for a valid reason (e.g. due to illness), you must contact your instructor within 24 hours of the test. At the instructor’s discretion, a make-up test may be offered. All make-up tests must be completed before the graded tests are returned to the rest of the class.
- If you miss a second test, you will be required to provide a documented reason for your absence in order to make-up the missed test. Without such documentation, your score for the missed test will be 0.
- If it is not possible to schedule a make-up test and you provide documentation, your grade for one missed test will be determined by your final exam grade.
- After making arrangements for a make-up test with your instructor, it may be necessary for you to contact the IU Kokomo Testing Center at 765 455 9395 to schedule a time for the test.

Math Lab Session component:

Math Lab Coordinator Contact Information

Math Lab Coordinator: Dr. Peter Tupa

e-mail: ptupa@iuk.edu

Office: KO 048a

Office Hours: By Appointment

Phone Number: 765-455-9496

Math Lab Session:

- The purpose of the Math Lab session is to support your learning in your Math-M104 class. Tutors and Lab Supervisors are always on duty to assist you as you strive to master the course material.
- Please use your time in the Math Lab to complete all reading, homework, quizzes, and graded homework assigned by your instructor as well as working towards mastery of the course material.
- Your attendance during your weekly Math Lab Sessions is a requirement of Math-M104
 - To succeed in this course you should expect to spend a minimum of 6 hours of learning time each week, in addition to time attending class.
 - Seventy-five (75) minutes of your study time will be in the IU Kokomo Math Computer Lab (Room KO 054) during your required Math Lab Session.
 - Your Math Lab Session attendance grade will be included in the computation of your Math-M104 course grade. The percentage reported on the Math Lab Canvas site will periodically be updated in MML.

Math Lab Session attendance requirement:

- Attendance during your weekly Math Lab session is a requirement of Math-M104.
 - Your Math Lab attendance percentage is one component in the computation of your grade in Math-M104.
 - The Roll Call feature in your Math Lab session Canvas will record your attendance grade as the percentage of the sessions that you have attended.
- You are expected to be present in the Math Lab AND working on Math-M104 assignments for your entire scheduled time.
 - If the tutors notice that you are working on assignments for other courses, checking or sending email, visiting Facebook, sending or receiving text messages, etc., you will be reminded that you are earning points toward your Math-M104 grade and you will be asked to re-focus your attention on math assignments. You will be counted as absent if you continue to use the time for purposes unrelated to your math class.
- If you are more than 15 minutes late, or if you leave more than 15 minutes before the end of your session, you will forfeit all of your attendance points for the week.
- If you arrive between 5 and 15 minutes after the start of your session, or if you leave between 5 and 15 minutes before the end of your session, you will be considered “tardy” and you will lose a quarter of the attendance points for the week.
- A limited number of make-up sessions will be allowed if you are unable to attend your required Math Lab session.

Math Lab Session Make-up Policy:

- To earn your weekly Math Lab session attendance points you must be present for your entire scheduled session. If illness or another unavoidable conflict prevents you from attending, you may earn the attendance points by attending a make-up session BEFORE your next regular Math Lab session.
- You will be permitted up to TWO (2) make-up sessions during the semester with no explanation required.
- Additional make-up sessions will be permitted only if you attach written documentation (medical, legal or campus) explaining the reason for your absence.
- Before you attend your make-up session, please print and complete a “Make-Up Request Form”.
- There is a link to the form in the “for your convenience” box on the front page of your Math Lab Canvas site.
- Give your completed form to the tutor on duty AT THE START OF THE MAKE-UP SESSION and remember to sign-in and out of one of the lab computers. At the end of the session, if your name is not on the sign-out roster, ask the tutor to add it for you.
- Attach written documentation to the form if you have already attended two make-up sessions this semester. The documentation must state clearly the reason you were unable to attend your scheduled session.

Math Lab session make-up times

| Monday through Thursday | Friday |
|-------------------------|----------------------|
| 8:30 – 9:45 am | 8:30 – 9:45 am |
| 10 – 11:15 am | 10 – 11:15 am |
| 11:30 am to 12:45 pm | 11:30 am to 12:45 pm |
| 1 to 2:15 pm | 1 – 2:15 pm |
| 2:30 – 3:45 pm | 2:30 – 3:45 pm |
| 4 – 5:15 pm | |
| 5:30 – 6:45 pm | |
| 7:00 – 8:15 pm | |

Math Lab Task List

While in the Math Lab, you will be expected to work on practicing and mastering mathematical techniques. You may not use the time to work on assignments for other classes. If you find yourself saying “I do not have anything to do,” please use the following list to see what other options there are for working towards math mastery.

- MyMathLab Homework assignments (You are allowed to work ahead)
 - You can also go back to previous homework and **Improve Your Score** up to 100%
- MyMathLab Quizzes
 - You can ask a tutor to go over past quizzes to help you understand any mistakes
- Graded Homeworks
- Skill Practice Sets (these are posted in the same location as the Graded Homeworks)
- Read the section of the textbook that you are currently covering in class
- You can ask a tutor to go over past exams to improve your understanding of previous mistakes
- Print out the Assignments List and work the **STRONGLY RECOMMENDED** textbook exercises
- Also from the Assignments List, work the Exercises from the printed textbook for additional practice
- MyMathLab Personalized Study Plans
 - In the MyMathLab page, click the left tab “MML Personalized Study Plan”
 - Based on your previous quizzes, MML will offer additional practice problems, guided help, and example videos of concepts and types of problems that still require mastery
- Test Review Practice Exams
 - On the Math Lab Canvas page are resources to help study for upcoming exams
- Pre-test & Post-Test: The Pre and Post test are the only assignments that **MUST** be completed in the Math Lab

APPENDIX A: Acquiring the MyMathLab Access Code

- There are several options to acquiring the MyMathLab code:
 - **Option 1: Textbook and MyMathLab Starter Kit bundle.** This includes both a physical textbook and an access code. Sometimes the code comes as an inserted card, or sometimes it can be found glued to the inside cover of the book. **CAUTION:** If you purchase the bundle from a location OTHER than the IUK bookstore, please ensure that the code is not listed as “used”. Some websites will claim that a code is include, but there is no guarantee that it has not already been used.
 - **Option 2: MyMathLab Student Access Kit.** A card with only the code can also be purchased at the IUK bookstore. This method is preferred by students using financial aid at the bookstore.
 - **Option 3: Purchase the MyMathLab Code directly** from the MyMathLab website. This purchase can occur during the registration process and requires a credit card or PayPal account.
- **Point of No Return:** If you are unsure that this is the correct class for you, **do not unwrap** your textbook bundle or enter your access code until after you have attended the first day of class and spoken to your instructor. The bookstore will not accept books for returns after they have been unwrapped, nor can they accept codes that have been used. Temporary Access to the MML website and textbook can still be used for the first two weeks of class.
- **Temporary Access:** If you are waiting on financial aid to come through and cannot yet purchase your materials, you can still get access to the MyMathLab website. When you are asked to register, you can optionally enroll in a temporary access period for **fourteen days**. This temporary access will allow you to complete your homework and read the textbook. After two weeks you will be required to purchase an access code. If financial aid is still pending at that time, please contact the Math Lab coordinator, Dr. Peter Tupa, as soon as possible.
- **Do you even need an Access Code:** If this is your first semester using MyMathLab with this textbook OR If you were enrolled in Math-M104 or Math-M105 PRIOR to fall 2106, you are required to purchase an access code. If you were enrolled in Math-M104 or Math-M105 DURING the fall 2016 semester or later, you do NOT need to purchase a new textbook and access code. You will need to use the same MyMathLab **login name** and **password** you used in your prior M104/M105 course to register for your new MyMathLab course.
- More specific cases should consult the MyMathLab Access Code FAQ to see if they need to purchase a new code or not.

Appendix B: Math Learning Resources

If you are having difficulty with any of the assigned work please take advantage of the following resources:

- Instructor office hours
- IUK Math Commons (KO 050) and Math Computer Lab (KO 054) are located on the lower level of the main building). Both areas are open and staffed with tutors during:
 - **Monday through Thursday, 9 am to 8:15 pm**
 - **Friday, 8:30 am to 2:15 pm**
- The tutors can assist you if you have trouble as you work through your online homework, textbook exercises, Graded Homework, Skill Practice Set exercises, or review your work on any items that have already been graded.
- One-on-one tutoring sessions can be scheduled for on campus or online. Visit or call the Math Commons (765 455 9586) to make an appointment. Leave a detailed message if no one is able to answer when you call.
- ONLINE HELP: Tutors are also available for online appointments during open hours. You can discuss your math questions with a tutor online using Zoom’s video and screen sharing program. For more information on Zoom click the following link.
 - <https://support.zoom.us/hc/en-us/articles/206618765-Zoom-Video-Tutorials>
 - To make an online appointment, call (765) 455-9586 or email komathph@iuk.edu and provide the following information:
 - Name
 - Email
 - Course and instructor
 - Topic to discuss
 - Day and two hour window you could be available for a 30 minute appointment
 - Your online appointment is not set until we email you back. At that time, you will be given a link to the Zoom meeting room for your tutoring session. You will need functioning technology (a working microphone, speakers, and a reliable internet connection) so that your tutoring experience can happen in a timely and efficient manner. If you must cancel your appointment, please contact us at komathph@iuk.edu

Appendix C: MyMathLab and Computer Technical Support

- Use the link below to get assistance setting up your **personal computer**:
- <http://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/support/index.html>
- If you encounter technical problems when working on your **personal computer** with the MyMathLab website, click on the circled question mark in the upper right corner of the browser for support options.
- If necessary, call the MyMathLab tech support center at 800-677-6337 or 844-292-7015.
- If the problem continues, it is your responsibility to report the problem to the Math Lab Coordinator by email (ptupa@iuk.edu) at the time of the problem.
 - Include your name, course and instructor, description of the problem, actions taken and “incident number” from your MML tech support contact.
 - The “time stamp” on the email message will be used by the coordinator when she calls the MyMathLab tech support center to confirm that connection to the MyMathLab was unavailable.
 - If it is determined that the problem was caused by a MyMathLab server error, the Math-M105 instructors will be informed and due dates will be adjusted as necessary, at the discretion of the instructors.
 - If the problem was the result of an issue with your personal equipment or your Internet Service Provider (ISP), a due date extension will be granted at the discretion of your Math-M104 instructor. If the problem recurs, you will be expected to work with your ISP to resolve the connection issues, without additional due date extensions.
- **On Campus Computer:** Please report the problem immediately to the IU Kokomo Math Lab coordinator, in person, in KO 054, by phone (765-455-9496) or by email (ptupa@iuk.edu). Your message should include your name and the name of your course and instructor, as well the location of the machine and a description of the problem encountered.

APPENDIX D: IMPORTANT DATES:

Campus holidays:

To allow our staff time to enjoy these holidays, the IU Kokomo Math Computer Lab and Math Commons Room (KO 054 and KO 050) will not be open on the days listed below:

- Monday, September 3, for Labor Day
- Monday October 15th and Tuesday October 16th for Fall Recess
- Wednesday through Friday, November 21st to 23rd, for Thanksgiving break

Performance rosters (early warning reports):

Your instructors will update your performance rosters at least twice during the semester. Be sure to review the rosters soon after these dates. Ask your instructor if you have questions about any notations posted.

- Sunday, August 26th (attendance only)
- Sunday, September 16th
- Sunday, October 21st

WITHDRAWAL DATES AND POLICIES:

- If it becomes necessary to withdraw from M105, it is your responsibility to complete the necessary transaction by the official deadline.
- Indiana University students can complete the withdrawal electronically through the Student Center at one.iu.edu.
- Purdue students should get the necessary form from the Purdue Student Services office in KC 139. In order to be valid, you must turn in the completed withdrawal form to the Purdue office by the close of business on the last date given, or earlier. Remember that you must get signatures from your M105 instructor AND your Math Lab Session instructor.
- No Schedule Adjustment forms will be signed/e-approved after Tuesday, October 23rd for Purdue University College of Technology Students, and after Sunday, November 25, for Indiana University students.

| | Indiana University | Purdue University |
|---|---------------------|----------------------|
| Last Day for withdrawal with automatic W | Sunday, October 21 | Monday, September 17 |
| Last Day for instructor approved withdrawal | Sunday, November 25 | Tuesday, October 23 |

Appendix E: Academic and Personal Conduct Policy:

- Please turn ALL electronic communication devices to vibrate before the start of class (cell phones, pagers, laptop computers, tablets, etc.). Receiving or sending messages (voice, text, photo or video) on these devices during class is considered a disruptive behavior and can also lead to a charge of academic dishonesty.
- **All online quizzes, graded homework assignments and in-class tests are to be your work alone.** Any evidence of cheating will be dealt with according to the Indiana University Code of Student Ethics. Students are expected to adhere to the Code of Ethics regarding classroom conduct. Any inappropriate behavior, disorderly conduct, or non-compliance with faculty directions can result in a charge of Academic and/or Personal Misconduct, which may result in a lowering of a course grade, course failure, or requirement to withdraw.
- **Use of computer algebra systems (CAS) to generate OR check answers to the online homework, graded homework, skill practice sets or quiz questions is NOT permitted and is considered cheating.** This includes the use of the CAS provided in the TI-89 and TI-Nspire CAS calculators as well as the numerous “math help” websites.
- You are permitted to work with your classmates on exercises from the online homework assignments, textbook exercises and skill practice sets. When you are working in the IU Kokomo Math Computer Classroom (KO 054) you should ask the lab tutors to assist you so your classmates can use their time to complete their work.
- The use of a calculator accessed through a mobile device (cell phone, tablet, etc.) is NOT permitted during in-class tests. **All electronic communication devices (cell phones, pagers, tablets, laptop computers, etc.) must be turned off or set to vibrate and should be placed in a book bag or under your desk while you are taking a test.** ANY USE OF THESE DEVICES DURING A TEST WILL BE CONSIDERED CHEATING AND YOU WILL NOT BE ALLOWED TO COMPLETE THE TEST. The instructor will relay any messages that have been sent by the IU Alert system.
- Students are expected to adhere to the Code of Ethics regarding classroom conduct.
 - Any inappropriate behavior, disorderly conduct, or non-compliance with faculty directions can result in a charge of Academic and/or Personal Misconduct, which may result in a lowering of a course grade, course failure, or requirement to withdraw.
 - Please be courteous to your classmates while working in the IU Kokomo Math Lab (KO 054).
 - Refrain from unnecessary conversations during your Math Lab session.
 - Please avoid using excessive amounts of perfume or after shave, as some students are very sensitive to these scents.
- Help us to protect the computers and maintain a space that is conducive to studying.
 - Food of any type is not permitted in the Math Lab.
 - If you bring a beverage, it must be in a container with a spill-proof lid. All “fountain type” cups with plastic lids and straws must be left on the provided space at the entrance to the room.
 - Tobacco and related products (vaporizers & e-cigarettes) are strictly prohibited on Indiana University property
- Go to <http://studentcode.iu.edu> for details about student rights, responsibilities and conduct.

APPENDIX D: Important Campus Services and Links

Accessibility Services:

<http://iuk.edu/academic-affairs/resources/Accessibility-Statement.php>

Important information about safety on campus:

<http://iuk.edu/academic-affairs/resources/Sexual-Misconduct-Statement.php>

Student handbook:

<http://www.iuk.edu/advising/handbook/>

Civility Statement

<http://iuk.edu/academic-affairs/resources/civility%20statement.php>

Student in Crisis Fund:

The purpose of this fund is to assist current IU Kokomo students who are in a situation that poses a threat to their health, safety, and/or well-being. Recipients are limited to receiving help up to once per calendar year, with a maximum \$200 disbursement, or at the committee's recommendation per student situation. If you would like to request assistance, please visit the Professional Staff Council website at <http://www.iuk.edu/psc/crisis-fund.php> and submit the application, or visit the Financial Aid Office in the Kelley Center, Room 230.

APPENDIX F: Math-M104 Course topics

Linear equations and application problems:

- Students will be able to translate a verbal problem into mathematical symbols.
- Students will be able to solve linear equations in one variable using algebraic techniques.
- Students will be able to estimate solutions to equations using the TI-84 TABLE feature.
- Students will be able to write a linear model for real world applications expressed in verbal form.
- Students will be able to solve the mathematical problem that models the verbal problem, using appropriate algebraic or technological methods.
- Students will be able to use the solution of the mathematical problem to draw valid conclusions about the verbal problem.

Functions:

- Students will be able to identify relations which are functions, when the relations are represented verbally, as sets of ordered pairs or in graphical form.
- Students will be able to use linear functions to analyze and interpret the relationships represented in graphical form, tabular form or equation form.
- Students will be able to identify the domain and range of functions that are represented with a graph, as a set of ordered pairs, or in verbal form.
- Students will be able to determine the value of linear, rational and polynomial functions using the equation form of a function, including inputs in variable form.
- Students will be able to determine the value of a function using its graph or tabular representation.
- Students will be able to determine the input corresponding to a particular function output, using the equation form of the (linear) function, the graph or a table.
- Students will be able to write new functions using the algebra of functions.
- Students will be able to identify the domain of the functions resulting from the addition, subtraction, multiplication or division of other functions.

Graphing solution sets of linear equations:

- Students will be able to graph solution sets of linear equations in two variables using point-plotting.
- Students will be able to graph solution sets of linear equations in two variables using a given point and the slope of the line.
- Students will be able to identify the x- and y- intercepts of the graph of the solutions set of a linear equation in two variables.
- Students will be able to determine and interpret the slope of a linear function, using the graph, the formula or two given points.
- Students will be able to interpret the meaning of the slope and intercepts of linear equations in two variables being used to model real world problems.
- Students will be able to write the equation of a line from its graph.
- Students will be able to write the equation of a line given the characteristics of its graph using the slope-intercept formula, the point-slope formula or the special forms for vertical and horizontal lines.
- Students will be able to write algebraic representations of linear functional relationships from real world applications by identifying and using two data points satisfying it.
- Students will be able to write the equation of a line parallel or perpendicular to another line and containing a specified point.

Inequalities:

- Students will be able to solve linear inequalities in one variable using algebraic techniques.
- Students will be able to solve compound inequalities in one variable using algebraic techniques.
- Students will be able to represent the solution sets of linear inequalities in one variable using interval notation, set-builder notation and a number-line graph.

Systems of equations:

- Students will be able to solve systems of two linear equations in two variables using the method of substitution, including systems with fractional coefficients.
- Students will be able to solve systems of two linear equations in two variables using the method of elimination by addition, including systems with fractional coefficients.
- Students will be able to solve systems of two linear equations in two variables using graphing.
- Students will be able to write and solve a system of linear equations to model interest, mixture, motion and business applications.

Polynomial terminology and operations:

- Students will be able to use the correct terminology to describe polynomial functions.
- Students will be able to perform operations of addition, subtraction, and multiplication with polynomials.
- Students will be able to simplify expressions with integer exponents.