MA-111 College Algebra

Amber Meis
FORT HAYS TECH | NORTH CENTRAL

COURSE INFORMATION

The course reviews the fundamental concepts of real and imaginary numbers along with symbolism used in Algebra. Concepts to be developed include solving and graphing linear and quadratic equations, exponential and logarithmic functions, systems of equations, and matrices. Students will apply these concepts to real-world situations through word problems.

Credits: 3

CLASS INFORMATION

Section Number: MA 111
Term: Summer Year: 2026 Start Date: 6/1/2026 End Date: 7/31/2026
Delivery Mode: Online

INSTRUCTOR

Amber Meis
Email: ameis@fhtechnc.edu
Office Phone: 7856236153
Office Location: Online
Office Hours: Virtual Office Th 5:15- 6:15 PM or by appointment.
Email is the best way to communicate with me and get in contact with me for the fastest response. My email is ameis@fhtechnc.edu. I do get back to students within 48 business hours.

TEXTBOOKS

Cengage Unlimited: (**Required**) ISBN: 978-0-357-70003-7 (comes with an electronic book- can rent the text for a minimal fee from the book company).

College Algebra 11th ed. (**Optional**) Ron Larson ISBN: 978-0-357-45409-1

SUPPLIES

- Paper and Pencil
- Graphing Calculator
- Computer

COURSE COMPETENCIES

1. Use functional notation, including finding arithmetic combinations and compositions of functions.

2. Recognize and distinguish between functions and relations (equations).
3. Use concepts of symmetry, intercepts, left- and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description.
4. Determine the domain and range of relations and functions.
5. Write the equation that describes a function (for types given above) or circle given its description.
6. Use graphs of functions for analysis.
7. Find arithmetic combinations and composites of functions.
8. Find the inverse of a function.
9. Solve equations, including literal equations, linear equations, quadratic equations by factoring and the quadratic formula, higher-order polynomial equations, equations involving rational expressions, equations involving radicals, and equations involving absolute value expressions, along with equations involving exponential or logarithmic functions.
10. Solve inequalities of the following types: linear (in one and two variables), polynomial, rational, and absolute value.
11. Solve systems of inequalities by graphing.
12. Apply equations from outcome #1 to real-world situations, including but not limited to depreciation, growth and decay, and max/min problems.
13. Examine and analyze data, make predictions/interpretations, and do basic modeling.
14. Solve systems of equations by various methods, including matrices.

GRADING INFORMATION

Fort Hays Tech | North Central Grading Scale:

A 100% -90%

B 89% - 80%

C 79% - 70%

D 69% - 60%

F 59% and below

Instructor Grading-

Grading will be awarded on a weighted point basis.

Each category will be part of your grade:

Chapter Online assignments

Optional: Application/Real-World Problem Completion

3 Unit Exams

1 Cumulative Final

Category	Percentage
Tests (15% each)	**45%**
Final Exam	**30%**

Weekly Assignments/ Notes	**25%**
Total	**100%**

Extra Credit will also be offered about midway through the semester.

ACADEMIC HONESTY

Membership in the Fort Hays Tech | North Central learning community imposes upon the student a variety of commitments, obligations, and responsibilities. It is the policy of this College to impose sanctions on students who misrepresent their academic work. Appropriate classroom instructors or other designated persons will select these sanctions consistent with the seriousness of the violation and related considerations.

Examples of academic dishonesty include, but are not limited to:

- Plagiarism: i.e., taking someone else's intellectual work and presenting it as one's own. Each department sets standards of attribution. Faculty will include disciplinary or class-specific definitions in course syllabi.
- Cheating is unacceptable in any form. Examples include consultation of books, library materials, notes, or intentional observation of another student's test on paper or a computer screen; accessing another student's answers from an exam to be given or in progress; submission of falsified data; alteration of exams or other academic exercises; and collaboration on projects where collaboration is forbidden.
- Falsification, forgery, or alteration of any documents about assignments and examinations.
- The use of AI-generated content from AI tools such as, but not limited to, ChatGPT, Dall-E, Co-Pilot, etc., is up to faculty discretion per course as stipulated within the course syllabus. Submitting AI-generated work as your own, without attribution, will be considered academic dishonesty.
- In courses where the use of AI tools is not permitted as stipulated within the course syllabus, work submitted using AI will be considered academic dishonesty.
- Students who participate in, or assist with, cheating or plagiarism will also violate this policy.

Classroom instructors and/or administrators will assess sanctions for violations of this policy. The seriousness of the violation will dictate the severity of the sanction imposed. Academic sanctions may include, but are not limited to, any of the following:

1. verbal or written warning
2. lowering of grade for an assignment
3. lowering of term grade

Administrative sanctions may include, but are not limited to, either of the following

1. Suspension from the course, program, or College
2. Dismissal from the course, program, or College

FORT HAYS TECH | NORTH CENTRAL MISSION STATEMENT

Fort Hays Tech | North Central delivers applied, innovative, and personalized education to empower learners, enrich lives, develop skilled professionals, and strengthen economic systems.

Vision Statement

Fort Hays Tech | North Central is dedicated to being a leader in workforce development by maximizing value for students, employers, and communities through educational excellence.

Core Values
Achieving EXCELLENCE with INTEGRITY through
DEDICATION
INNOVATION
COLLABORATION
COMMUNICATION

FORT HAYS TECH | NORTH CENTRAL NON-DISCRIMINATION POLICY

To provide equal employment, advancement, and learning opportunities to all individuals, employment and student admission decisions at Fort Hays Tech | North Central will be based on merit and qualifications. Fort Hays Tech | North Central does not discriminate based on any characteristic protected by law in all aspects of employment and admission in its education programs or activities. Any person having inquiries concerning Fort Hays Tech | North Central's non-discrimination policy, including the application of Equal Opportunity Employment, Titles IV, VI, VII, IX, Section 504, ADA, and impending regulations, is directed to the VP of Student and Instructional Services at (800) 658-4655, or compliance@fhtechnc.edu, or PO Box 507, 3033 Hwy 24, Beloit, KS 67420.

FORT HAYS TECH | NORTH CENTRAL TOBACCO USE POLICY

The use of tobacco products in any form and/or electronic cigarettes is prohibited in or within ten (10) feet of any building owned, leased, or rented by the College. Kansas Law established the minimum age of 21 to sell, purchase, or possess cigarettes, electronic cigarettes, or tobacco products. Underage use or possession of any of these products is prohibited on property owned, leased, or rented by the College.

FORT HAYS TECH | NORTH CENTRAL WEAPONS POLICY

Fort Hays Tech | North Central prohibits the possession and use of firearms, explosives, and other weapons on Fort Hays Tech | North Central property, with certain limited exceptions. Please refer to the Fort Hays Tech |North Central Student Handbook for the full policy.

INCLEMENT WEATHER

College campus dismissals and cancellations will be announced using the College Alert system. Local media will also be notified.

OVERVIEW FOR STUDENTS WITH DISABILITIES

Fort Hays Tech | North Central is dedicated to providing equal access and opportunity to all campus programs and services for students with disabilities. We are committed to providing reasonable accommodations in accordance with applicable state and federal laws, including, but not limited to, Section 504 and 508 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. We strive to create a safe, respectful, and inclusive environment and promote awareness, knowledge, and self-advocacy.

Fort Hays Tech | North Central acknowledges that traditional methods, programs, and services are not always appropriate or sufficient to accommodate the limitations experienced by some qualified persons with disabilities. When a student's disability prevents him/her from fulfilling a course requirement through conventional procedures, consideration will be given to alternatives, **keeping in mind that academic standards must be maintained**.

Services are provided through Student Accessibility Services (SAS) staff located in the Student Success Center, on the Beloit Campus, and in Student Services, on the Hays Campus.

- Director of Learning Services may be reached at 1-785-738-9020 or by mail at Fort Hays Tech | North Central, 3033 US Hwy 24, Beloit, KS 67420.

Student Responsibilities
Students requesting support services will need to register ("self-disclose" and complete Student Accessibility Services Intake and Consent Form), provide appropriate documentation (if available) including how the disability affects academic performance and suggested accommodations, and communicate with the Director of Learning Services as part of the interactive process to create an *Educational Accommodation Plan* that will notify Instructors of approved accommodations, services and/or auxiliary aids.

Students are encouraged to make timely and appropriate disclosures and requests, at least two weeks in advance of a course, program, or activity for which an accommodation is requested (or as soon as realistically possible) to allow adequate time for accommodation services to be set in place.

Accommodations, Academic Support Services, or Auxiliary Aids
Reasonable accommodations, including academic support services and auxiliary aids, are provided to allow students with disabilities an equal opportunity to participate in and benefit from our educational programs. Accommodations will be provided on a case-by-case basis determined by student request, documentation, intake interview, the Educational Accommodation Plan team, and assessment of individual needs and course requirements.

Reasonable testing accommodations may include, but are not limited to:
- Extended testing time
- Reduced distraction testing environment
- Test reader and/or scribe
- Use of a calculator

Academic support services/auxiliary aids may include, but are not limited to:
- Note-taking assistance (second set of notes, PowerPoint slides, or other visual aids provided)
- Sign Language Interpreter
- Preferential seating in the classroom
- Large print exams, handouts, signs, etc.
- Telecommunications devices
- Use of Assistive Technology

Accommodations may not fundamentally alter the nature of the program or activity, lower academic standards, present undue financial or administrative burden on the college, or pose a threat to others or public safety.

Additionally, some accommodations and services cannot be provided, such as personal devices or assistance with personal services.

Auxiliary aids may be available through a variety of sources available to individual students. The student may make a request for specialized support services from other resources such as Vocational Rehabilitation Services (VR), Recordings for the Blind, Kansas Talking Book Service, etc. For example, Vocational Rehabilitation may fund such items as transportation to the institution, tuition, textbooks, hearing aids, and other individually prescribed medical devices.

If at any time throughout the academic year, a student feels that the agreed-upon accommodations are not being followed or that alternate accommodations need to be provided, the student should notify Student Accessibility Services (SAS) staff. Fort Hays Tech | North Central is committed to student success; however, we do not require students to use accommodations. The decision of when to utilize approved accommodations or services is up to the student. Integration, self-advocacy, and individual responsibility are promoted and expected.

Grievance Procedure
Any student who believes he or she has been subjected to discrimination on the basis of disability or has been denied access or accommodations shall have the right to invoke the Grievance Procedure.

Students are encouraged to first discuss their concerns with SAS. An attempt will be made to resolve the issue(s) causing concern by assisting the student in discussions with the person(s) involved. Most situations are positively resolved through this process. If the

student does not feel the concern or complaint has been appropriately resolved, he or she should contact the Vice President of Student and Instructional Services at 1-800-658-4655 or PO Box 507, 3033 US Hwy 24, Beloit, KS 67420, where grievance procedures are filed for all students, including students with disabilities.

If the complaint is not resolved at the College level, a student may choose to file a complaint with the Office for Civil Rights at 1-816-268-0550 or U.S. Department of Education, One Petticoat Lane, 1010 Walnut Street, Suite 320, Kansas City, MO 64106.

Confidentiality

All information regarding a student's disability is confidential. All documentation will remain separate from academic records and will not be released to an individual or source external to Fort Hays Tech | North Central without the student's written consent. In order to provide effective services, it may be necessary to communicate limited information on a need-to-know basis regarding disability-related needs to Fort Hays Tech | North Central faculty and/or staff.

REASONABLE SUSPICION

If reasonable suspicion of substance abuse exists regarding an employee or student based on objective criteria (including, but not limited to, behavior, appearance, demeanor, detection of the odor of alcohol or any controlled substance), the employee or student will be requested to consent to drug testing performed by Fort Hays Tech | North Central's contract vendor at the expense of the college.

A. A college administrator (or their designee) shall drive the employee or student to the vendor's site for drug testing and shall return the employee or student to his/her residence (or arrange for transportation) following the testing.

B. Test results shall be sent directly to the college administrator, with a copy also sent to the employee or student. All test results will be considered confidential, and access to the results will be limited to institutional personnel who have a legitimate need-to-know.

C. In the event of a positive test result, the employee or student may request a retest of the sample at the employee's or student's expense. The request must be submitted within 24 hours.

D. Positive results for any illegal drugs, or prescription drugs (either not prescribed for the employee or student, or at levels above the prescribed dosage), or a blood alcohol level of 0.04 or greater shall be grounds for disciplinary action, up to and including termination or expulsion.

E. Refusal to provide a specimen for this testing shall be treated as a positive drug test result.

F. Test results or specimens that have been determined to be altered by the employee or student shall be grounds for disciplinary action, up to and including termination or expulsion.

G. If the employee or student tests positive for an authorized prescription drug that may impair his/her performance or judgment, the employee or student may not be permitted to participate in college activities until he/she provides a doctor's release.

RIGHT TO MODIFY THE SYLLABUS

The instructor reserves the right to modify the syllabus during the semester. Students will be given advanced notice if a change occurs.

MUTUAL RESPECT

The mathematics classes are designed for collaboration rather than competition. That means that each member of the class supports the others in their efforts to succeed. Be sure to come to each class prepared to:

1. Listen with respect.
2. Speak with respect.
3. Contribute actively to the work of your team.

GUIDELINES FOR SUCCESS

Attendance Policy:

Consistent attendance and engagement in this course are of utmost importance. Please ensure that you sign in and complete your assignments each week. Regular completion of homework assignments is essential to your academic success. It is recommended that you work on assignments throughout the week, rather than concentrating your efforts

solely on weekends, as instructor availability for questions may be limited during that time. Proactive engagement will help ensure that you acquire the knowledge necessary to succeed in this course.

This course consists of three primary components. First, you are required to complete online assignments on WebAssign through Cengage. In addition, you are expected to write a discussion board post each week and reply to a classmate's discussion. To further support your learning, optional resources, such as real-world application problems and video lectures with accompanying notes, are available. The course also includes three (3) unit exams and a comprehensive final examination.

Assignment Policy:

You are permitted and encouraged to use a calculator for this course. Please ensure your calculator can compute large exponents.

Late assignments will not be accepted after the established due dates. If you are facing extenuating circumstances that may warrant an extension, you must contact the instructor well in advance of the assignment deadline. Extension requests submitted prior to the due date weekend are more likely to receive favorable consideration. Students should not defer assignment completion until the weekend and then claim they cannot access online resources. While some assume that online courses permit concentrated weekend work sessions, this approach does not constitute best practice. The optimal approach involves engaging with course lessons early in the week and starting homework promptly, thereby allowing sufficient time to address any questions. Consistent engagement with assignments throughout the week is the most effective path to academic success.

Important Notice: Always take a screenshot of your scores before submitting your assignments, particularly exams. In the event of an internet disruption during testing, you may be able to continue your exam without realizing a problem has occurred, but your score could be lost. Retain these screenshots until your official grade has been posted and verified. Failure to document your scores may result in a zero, the need to retake the assessment, or the necessity to redo the assignment. Please note that technical issues are beyond the instructor's control, and students are responsible for safeguarding their work.

- Assignment problems frequently appear on examinations in identical or similar forms; therefore, mastering problem-solving techniques and allocating adequate time to practice are essential. Students are allotted five (5) attempts to obtain correct answers to problems, and it is strongly recommended that all available attempts are utilized. If a problem is answered incorrectly three (3) times without understanding the error, students should contact the instructor via Blackboard Messenger, email, or the "ask my teacher a question" feature in Cengage to request clarification. Students are encouraged to photograph their work and email the image to the instructor, facilitating identification of procedural errors and provision of appropriate feedback. Please note that questions deferred until the weekend may receive delayed responses, as instructor availability is greater during the week.

Online assignments are due on Sundays at 11:59 p.m. each week (and occasionally on Wednesdays, as specified). There are also optional extension problems that are available to assist you in understanding the concepts. About the paper problems- these are meant to be more difficult than the WebAssign. These problems are used to help you think more deeply about the subject and the problems, and incorporate the learning that you have had that week. These problems come directly out of the book and can be used for a greater understanding of the subject. Also, if you need a little extra help, I will be available to give that to you by emailing me and asking me for help with the concepts you are not understanding.

You must take the final exam. If you do not take the final exam, you will not pass this class. The final exam is used to find out that you know the material that was to be learned throughout the semester. If you do not take the final exam, you

cannot show that you know the material that was to be learned in the class; therefore, you will not pass if you do not take the exam.

Proctor:
All examinations must be proctored, either through a live proctor or an approved proctoring program. Additional details regarding the proctoring process will be provided in advance. If a live proctor is required, acceptable options include a former teacher, a school employee with a school email address, a member of the clergy, or a librarian. Please begin considering potential proctors as soon as possible.

Videos:
For my face-to-face classes, I use what is known as a "flipped classroom" approach to teaching. This means that I video the basics of the lesson and send it to my students. I have those videos for you to access so they can help you as well. I have also left the notes for you to download and take notes on the video if you so desire. These videos are not for your entertainment value and are only to be used for the purpose of providing information to you about the concepts of the chapter. Then the students will come to class and work on the problems in class while I am present, so I can assist them if they need it. Another good reason I video the lesson, some of you may only need to hear it one time, and you can get the process down. There are some of you, though, who require more exposure to the content than that, and this provides you with the opportunity to watch the videos again at your convenience.

Academic Dishonesty and AI Policy:
The use of generative AI tools (such as ChatGPT, DALL-E, Grammarly, etc.) is permitted in this course for the following activities:

- Brainstorming
- Refining research questions and answers
- Drafting and outlining

However, the use of generative AI tools is not permitted for the following:

- Impersonating students in classroom contexts, including composing discussion board prompts and responses
- Completing group or individual work assignments
- Composing drafts of writing assignments.

Student use of AI tools must be properly documented and cited to ensure compliance with institutional policies on academic integrity. All information provided by AI tools must be independently verified for accuracy. This requirement applies to all AI-assisted activities, including those used to refine written work.
All submissions will be processed through AI detection software. If AI usage is detected, the following procedures will be implemented:
• First occurrence: The student will receive a written warning, accompanied by a screenshot indicating the percentage of AI-generated content detected. This warning will be sent to the student's Fort Hays Tech | NC email address.
• Second occurrence: The student will receive no credit for the assignment and a second written warning regarding the suspected use of unauthorized sources, including AI-generated content or the work of others.
• Third occurrence: The student will receive a zero for the course and may be recommended for administrative withdrawal from the course and possible expulsion from the institution, in accordance with the academic integrity policy.
Regarding collaborative work on assignments: Students are permitted to work collaboratively on online problems; however, collaboration must not involve copying another student's work or answers. Appropriate collaboration entails

two or more students working simultaneously on their respective assignments while discussing solution strategies, agreeing on problem-solving methods, and engaging in mutual learning.

Office Hours:

I will hold virtual office hours on Thursdays from 5:15 to 6:15 p.m. via Microsoft Teams. This is an opportunity for you to ask questions, seek clarification, and receive academic support. Additionally, I am available to tutor, answer questions, or review material via email or video correspondence. My goal is to support your success, so I encourage you to reach out for assistance as needed.

Please note: As this is an online course, much of your learning will be self-directed. The textbook is an excellent resource, offering comprehensive explanations and examples. Developing the ability to learn independently is a valuable skill that will benefit you throughout your academic and professional career. While I am available to help with challenging concepts, I may not be able to address every individual problem. I encourage you to utilize all available resources and communicate any difficulties you encounter.

In addition to the videos provided, several supplementary resources are available should you require further assistance. The textbook offers tutorial problems being completed on video as well. To access those, go to www.larsonprecalculus.com, find your book, and go to instructional videos. Find the chapter you are on and the section where the concept is shown. These have proven to be very valuable to past students. Other places that you may find assistance if you get into a situation where you need help would be on YouTube. Look up the concept you are having difficulties with and watch a few videos. One good source would be through Khan Academy. Some mobile applications may also provide step-by-step problem-solving guidance; however, these should be used solely as a learning aid. Please note that the use of such applications will not be permitted during examinations, so it is important not to become reliant on them for course assignments.

Brainfuse Tutoring, available through Blackboard, is another valuable resource. This online tutoring service is accessible 24/7 and is provided by Fort Hays Tech | North Central. Additionally, your scientific calculator can be a helpful tool; by inputting the appropriate formulas and numbers, you can efficiently solve problems. Instructional videos demonstrating calculator functions can be found on YouTube by searching for your calculator's model and the specific operation you wish to learn.

Importance of Class Participation:

1. Utilize a calculator when appropriate.
2. Please feel free to reach out with any questions.
3. Mistakes are a natural part of the learning process and should be viewed as valuable opportunities for growth. Both instructors and students alike will make errors; embracing and learning from these experiences is encouraged. You will be allowed to complete each WebAssign problem 5 times. If you do not have the right answer by the third time, you should reach out to the instructor by email for assistance and to find out why you are not getting the right answer. The expectation is that you will have 100% by the end of the assignment.
4. Please know that I am committed to supporting your academic success. I dedicate significant time to assisting students individually and am always willing to help guide you in the right direction. Collaboration is key; your proactive communication and positive attitude will greatly facilitate our work together. I encourage you to approach all interactions with professionalism and respect, as this fosters a productive and supportive learning environment.
5. It is highly recommended that you show all steps of your problem-solving process in writing, both for your own reference during assessments and when seeking assistance. Providing complete work enables more effective

support and allows for accurate identification of areas requiring further explanation. When requesting help, please be prepared to share your written work so that I can best assist you in reaching the correct solution.

6. Access class regularly, participate actively, complete assignments diligently, and dedicate approximately twice as many hours to independent study as the number of credit hours this class is worth (so 3 x 2 = 6 hours a week). Consistent effort is directly correlated with academic success.

"**Education is the most powerful weapon which you can use to change the world**." - Nelson Mandela

Summer 2026 Online Schedule

Week	Chapter	Assignment(s)	Objectives Covered
1	Chapter 1	Chapter 1 Online Introduce Yourself Optional: Watch Video/ Notes/ Slides/ Application Problems	*Solve equations, including literal equations, linear equations, quadratic equations by factoring and the quadratic formula, higher-order polynomial equations, equations involving rational expressions, equations involving radicals, and equations involving absolute value expressions, along with equations involving exponential or logarithmic functions. *Solve inequalities of the following types: linear (in one and two variables), polynomial, rational, and absolute value. *Solve systems of inequalities by graphing. *Apply equations from #1 in this core outcome to real-world situations, such as depreciation, growth, and decay, and max/min problems. *Examine and analyze data, make predictions/ interpretations, and do basic modeling.
2	Chapter 2	Chapter 2 Online Optional: Watch Video/ Notes/ Slides/ Application Problems	*Use function notation, including finding arithmetic combinations and compositions of functions. *Recognize and distinguish between functions and relations (equations). *Use concepts of symmetry, intercepts, left-and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description. *Determine the domain and range of relations and functions. *Write the equation that describes a function (for types given above) or the circle given in the description. *Use graphs of functions for analysis. *Find the inverse of a function.
3	Chapter 3	**Test 1 (Chapters 1- 2)**	*Use concepts of symmetry, intercepts, left-and right-hand behavior, asymptotes, and transformations to sketch the graph of various types

		Chapter 3 Online Optional: Watch Video/ Notes/ Slides/ Application Problems	of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description. Write the equation that describes a function (for types given above) or the circle given in description. *Use graphs of functions for analysis.
4	Chapter 4	Chapter 4 Online Optional: Watch Video/ Notes/ Slides/ Application Problems	*Use concepts of symmetry, intercepts, left-and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description. Write the equation that describes a function (for types given above) or the circle given in description. *Use graphs of functions for analysis.
5	Chapter 5	**Test 2 (Chapters 3- 4)** Chapter 5 Online Optional: Watch Video/ Notes/ Slides/ Application Problems	*Solve equations, including literal equations, linear equations, quadratic equations by factoring and the quadratic formula, higher-order polynomial equations, equations involving rational expressions, equations involving radicals, and equations involving absolute value expressions, along with equations involving exponential or logarithmic functions. *Use function notation, including finding arithmetic combinations and compositions of functions. *Use concepts of symmetry, intercepts, left-and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description. Write the equation that describes a function (for types given above) or the circle given in description. *Use graphs of functions for analysis. *Apply equations in this core outcome to real-world situations, such as depreciation, growth, and decay, and max/min problems. *Examine and analyze data, make predictions/ interpretations, and do basic modeling.
6	Chapter 6 Chapter 7	Chapter 6 Online Chapter 7 Online Optional: Watch Video/ Notes/ Slides/ Application Problems	*Solve systems of equations by various methods, including matrices.

7		**Test 3 (Chapter 5-7)**	
8		**Final Exam** **(Chapters 1-7)**	