

Place this document as the first page of your Precalculus 3-ring binder

Precalculus Course Requirements

Teacher: Mrs. C. Kramer

To my students,

I am excited about teaching precalculus this semester. We have approximately 85 days to complete the appropriate 11th and 12th Ohio Grade Level Indicators, while simultaneously preparing for the Advanced Placement Calculus Curriculum. I will come to class prepared with class notes and activities to help you master the objectives for the day. The most important thing you can do for success in precalculus is to come to class everyday with a positive attitude. Stay on task during class and set aside time to complete your precalculus homework every night. Enjoy the semester and be proud of the work you complete in this class.

*Best of luck to everyone,
Mrs. Connie Kramer*

Rules: All rules in the student handbook will be enforced. These rules foster a positive and safe learning environment. Mutual respect for every individual in the classroom, including your teacher, fellow students and substitute teachers is required every day. *Pay particular attention to the following:*

Tardiness: The second class tardy & every tardy thereafter will result in a referral.

Cell Phones: Cell phones are not permitted in the classroom.

Eating and Drinking: Food and drink are not permitted in the classroom.

Materials: *(By Friday of the first week of class)*

Graphing Calculator (TI83+ or comparable)

Book cover on your Precalculus book

3-ring Binder for this class only

Graph Paper

Loose leaf Paper

Sharpened Pencil with Eraser

Class/Homework: If you wish to earn full credit, you will...

Come to class with the above listed materials

Be seated and be ready to work when the bell rings

Copy down all class notes and example problems

Complete all assigned problems, individually, with partner, or in groups

Write down the problem and work for each problem

Check all problems during class and make corrections and clarification

Partner/Group Work: When working in groups, you are expected to ...

Stay in your assigned seat

Speak only to your group members

Keep voices low and personal talk to a minimum

Work together

Ask questions only if the entire team needs help

Tests and Quizzes: Students may not speak to one another for any reason during tests and quizzes. If students are speaking to one another, it will be assumed that they are cheating and their paper will be taken. Cell phone use during a test or quiz will also be considered cheating.

Passes: Each student may use 2 restroom passes per nine weeks. If you have special restroom needs, your parent should contact the school nurse at 543-9821.

Help: Help is available during homeroom every day. Get a pass at the end of class or before/after school. Please take the initiative to seek help before you fall behind on a topic.

Grades: Grades are determined using the scale in the school handbook.

90-100% A

80-89% B

70-79% C

60-69% D

Final Grade: Your final grade for the course is determined by combining your 2 nine-week grades along with your final exam. See the student handbook for details.

Contact Information: Your parents may contact me at connie.kramer@kenstonlocal.org. I check email daily so if they do not receive a response they may leave a message at 543-9821 ext. 3055.

Misc. Info:

Currently the course requires the use of a TI-83 or 84 graphing calculator. However, part of the development of strong mathematical reasoning skills includes the ability to exhibit mental math skills. Therefore, portions of the course will require students to mentally calculate and process many of the ideas and concepts without using technological assistance. A portion of the assessments may limit the use of calculators.

At the precalculus level it is expected that all students are properly using homework as a self assessment tool. The primary purpose of homework is to allow students to gauge their understanding of material covered and seek assistance when they are struggling or absent. Solutions to all odd problems are in the back of the text and students must check their solutions after every assignment. Our text provides two excellent online resources for students. These sites not only provide answers to all odd problems, but they also include step by step solutions and work. (See www.classzone.com and www.CalcChat.com) Homework that is submitted must show all work, including detailed graphs and proper notation. Calculator commands should be recorded. Your chapter syllabus is posted online @ www.kenstonlocal.org.

Students are expected to keep an organized 3 ring binder throughout Precalculus. Binders need to include graph paper, notebook paper, class notes, worksheets, homework and homework quizzes. Binders will not be checked for a grade, but may be looked at if a student is falling behind or wants suggestions on how to improve his/her grade in class. At the end of the course, students will have developed a valuable resource to reference during calculus.

Topics/Chapters/Sections/Assessments covered in Precalculus

<p><u>Chapter 2: Polynomial and Rational Functions</u> §1.2 Functions (<i>review</i>) §1.3 Functions and their Graphs (<i>review</i>) §2.1 Quadratic Functions §2.2 Polynomial Functions of Higher Degree §2.3 Real Zeros of a Polynomial Functions §2.4 Complex Numbers Quiz through 2.3 (70 points) §2.5 The Fundamental Theorem of Algebra §2.6 Rational Functions and Asymptotes §2.7 Graphs of Rational Functions Chapter 2 Exam (105 points)</p>	<p><u>Chapter 9: Topics in Analytic Geometry</u> §9.1 Circles and Parabolas §9.2 Ellipses §9.3 Hyperbolas §9.4 Solving Systems of Quadratic Equations Quiz through 9.4 (75 points) §9.5 Parametric Equations §9.6 Polar Coordinates §9.7 Graphs of Polar Equations Library Research Day circles, limacons & rose curves (10 pts) Chapter 9 Exam (105 points)</p>
<p><u>Chapter 6: Additional Topics in Trigonometry</u> §6.1 Law of Sines §6.2 Law of Cosines §6.3 Vectors in the Plane Quiz through 6.2 (20 points) §6.4 Vectors and Dot Products §6.5 Trigonometric Form of a Complex Number Chapter 6 Exam (80 points)</p>	<p><u>Chapter 10: Analytic Geometry in 3 Dimensions</u> §10.1 The Three Dimensional Coordinate System §10.2 Vectors in Space Quiz through 10.2 (30 points)</p>
<p><u>Chapter 8: Sequences, Series, and Probability</u> §8.1 Sequences and Series §8.2 Arithmetic Sequences and Partial Sums §8.3 Geometric Sequences and Series §8.4 Mathematical Induction Quiz through 8.3 (70 points) <i>**Last quiz for the quarter**</i> §8.5 Binomial Theorem §8.6 Counting Principles §8.7 Probability Chapter 8 Exam (115 points)</p>	<p><u>Chapter 11: Limits & an Introduction to Calculus</u> §11.1 Introduction to Limits §11.2 Techniques for Evaluating Limits §11.4 Limits at Infinity and Limits of Sequences Quiz through 11.2 (40 points) §11.3 The Tangent Line Problem (if time) §11.5 The Area Problem (if time)</p>
<p>Final Exam Part I covers chapters 2, 6, 8</p>	<p>Final Exam Part II covers chapters 9-11</p>

Homework quizzes are each worth six points and will be used to assess mastery of key concepts covered in Precalculus. Homework quizzes are generally taken two days after homework is assigned. This allows time for questions to be answered in class as well as during homeroom. Students are encouraged to work together on homework and to reference the support websites listed on the course requirement sheet. An individual homework quiz will cover approximately two of the assigned homework problems. Students have approximately 10 minutes to complete these problems and present them for a grade. Work submitted must be detailed and lead to the correct answer. Proper notation is required and students must work independently. If a student is absent, homework quizzes can be made up during homeroom or after school.

On the day a graded homework quiz is returned, students may choose to staple their original homework to their homework quiz and resubmit for 1 or 2 additional points. This policy is an incentive for students to go back and complete missed homework and to offer a “cushion” for mistakes made on a homework quiz. The maximum score on each homework quiz is 6 points.

Excellent Support Resources in Your Text

1. Where is the location of the **formulas from geometry**?
2. Where is the location of the **definitions of six trigonometric functions**?
3. **True or False:** All even answers are in the back of your text (see page A137)
4. **True or False:** All answers for chapter tests are found in the back of the book (see page A171 bottom left)
5. On what page is the first “Study Tip” in section 2.1? _____ What does the “Study Tip” cover?
6. On what page does the Index start?
7. At the end of every chapter, you’ll find a concise chapter summary of vocabulary, formulas, definitions, etc... See page 460 for an example of a chapter summary. Write down Heron’s Area Formula.

8. See page vi. What is covered in the following Appendices?

A: _____

F: _____

B: _____

G: _____

E: _____

9. See page A126 and review the following two Study Capsules: Equations and Functions
(*you don’t need to write anything down, but make a mental note of the location of this information in case you need to reference it in the future*)
10. See the last page of your text along with the back cover. List the first 12 Parent Function names.

1. _____

5. _____

9. _____

2. _____

6. _____

10. _____

3. _____

7. _____

11. _____

4. _____

8. _____

12. _____

Your teacher will demonstrate two online resources in class.

Write down the key features on each site.

www.classzone.com

www.CalcChat.com