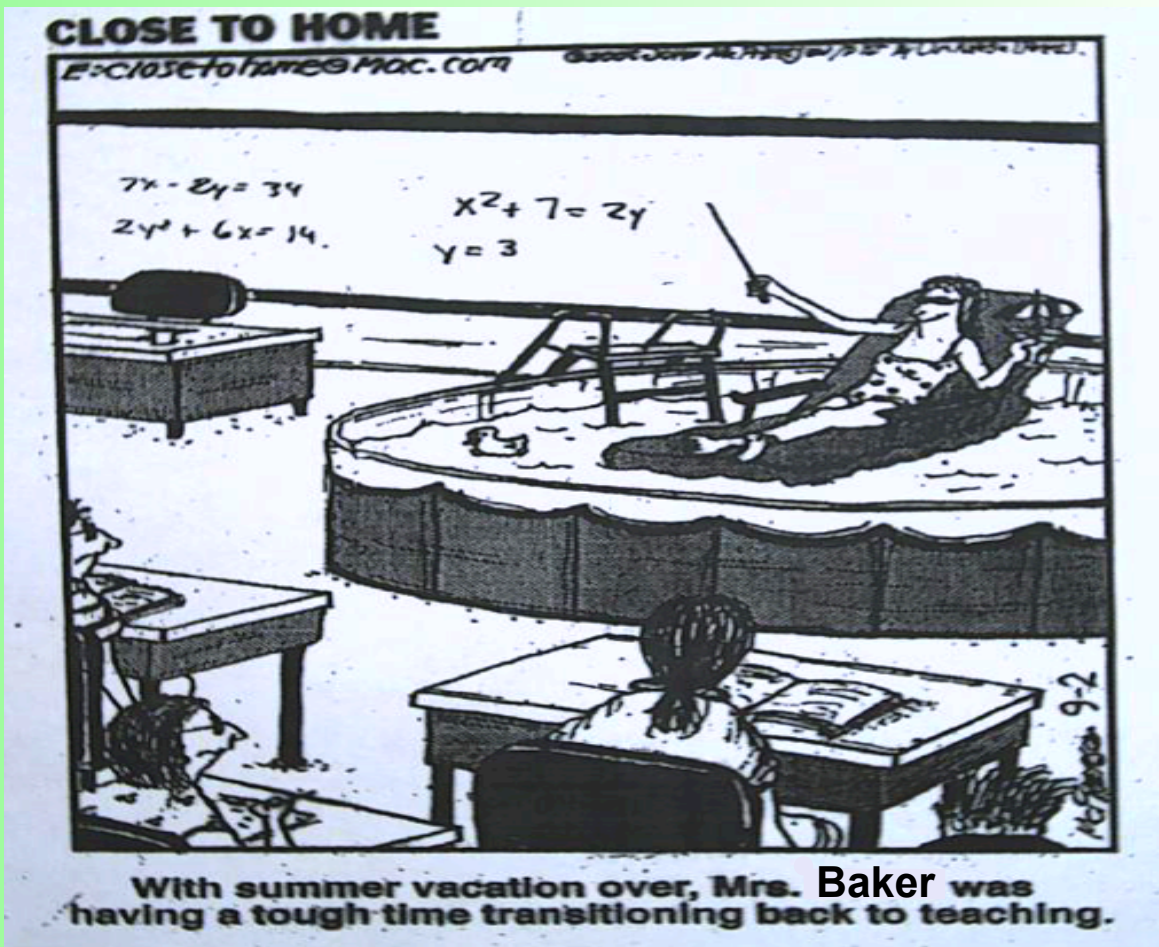


Welcome to Precalculus! Sit where you like today.



COURSE INFORMATION 2013-2014
Precalculus

Teacher: Mrs. Baker

Website: <http://debbiebaker.wikispaces.com>

Email: baker_de@4j.lane.edu

Text: *Precalculus* (2nd edition) Larson/Hostetler and *Mathematics Standard Level* (3rd edition, 2nd imprint) Fabio Cirrito

Office Hour: Tuesday and Thursday 8:00 - 8:30 and Wednesday 3:00 - 3:30 or by appointment.

Course Description

This course is intended for both IHS students who are pursuing an International Baccalaureate diploma and classic South students and follows successful completion of Algebra 2/Trig with teacher recommendation. The areas of study include algebra, functions and graphs, trigonometry, vectors, analytic geometry, and sequence and series. An optional 3rd trimester course Precalculus C will include statistics and probability as well as an independent math project paper. This paper is required for the full International Baccalaureate Diploma. Students who complete 3 trimesters and do the project will receive Precalculus SL credit for the 3 trimesters. Students will have opportunity to apply the 8 Common Core Standards for Mathematical Practice throughout the course. Specific content standards will be targeted, practiced and assessed with the goal of mastery at some point during the year ~~as is appropriate for a first-year course in Algebra~~. More information about the Common Core Standards can be found at www.ode.state.or.us/search/page?id=2860. Students will need to complete Precalculus A and B in order to take AP Calculus.

Course Requirements

- 1) Prompt and regular attendance. Regular attendance is very important in Precalculus. There will be group investigative activities and assessments that can't be made up if they are missed.
- 2) Completion of daily homework assignments. Assignments are to be done neatly in pencil, include your name, period and assignment description at the top, and **show your work**. All answers will be given, and it your job to show how to get that answer! An assignment will not be considered complete if work is not shown. I will give specific examples in class so you will know what I expect to see. Students are responsible for obtaining missed work, either from the assignment sheet posted in class or from my website. Extra copies of worksheet assignments are kept in a basket in the classroom for students to help themselves. Work will be done daily and turned in once a week in the form of a homework quiz.
- 3) Warm-ups. Most days begin with a warm-up. You must be on time to receive points for the warm-up. If you are absent, you will need to go on line to get the warm ups.
- 4) Quizzes. Quizzes will be in a variety of formats. In addition to the weekly homework quiz where students are asked to show the work to certain homework problems, there will also be short "dicker" quizzes to check for understanding. Every unit will have a mid chapter quiz as well.
- 5) Chapter Tests. Will be announced well in advance.

Supplies

Students are required to have a graphing calculator. We will be using the TI-83 or the TI-84 in class. (any version is fine) If you are financially unable to obtain a grapher, you may borrow one for the year. It would also be helpful to have graph paper and a designated math notebook. An assignment sheet will be provided for you to keep track of the assignments and upcoming assessment dates. Assignments will be posted on the wall in the classroom and to my website.

Misc.

All personal electronics must be off and away during class. I'm not fond of policing these things. If they end up on my desk, you may have to speak to an administrator to get them back. No food or soft drinks are allowed in the classroom. Water is OK.

Help

The math resource center is upstairs in room 702. My office is inside the resource center. Please ask questions and get help when you need it! If you are absent, you are encouraged to use my website to get class notes and to do the warm ups. Homework solutions will be posted there as well. Check Synergy online to keep track of your progress. Parents and students should contact me with questions. Appropriate modifications will be made for identified special needs.

Grading

Grades will be posted in the classroom by student number following completion of each chapter and periodically posted to Synergy. Your grade will be based on a variety of activities and assessments both individually and in groups as outlined in the Course Requirements above. Parts of the grade will be weighted as follows:

fix!!!!

Grades Weighted

5% Warm Ups & Classwork
30% Homework Assignments
 50% Quizzes & Tests
 15% Final Exam

Grading Scale

A = 90 - 100%
 B = 80 - 89%
 C = 70 - 79%
 D = 60 - 69%
 F = below 60%

Please sign and return:

(cut here and keep the top)

I have read and understand the course information presented above for Precalculus, Mrs. Baker, 2013-2014.

 (Student)
 (date)

 (date)

 (Parent or guardian)

Who owns a TI graphing calculator
and feels comfortable graphing with it?



need 10 TI experts

Congratulations, you will be our group leaders today!

Form groups according to the number I give you, and look at the map on the next page to see where your group should sit.

Group leaders will pick someone to come up and get a worksheet and a grapher for everyone in the group. (even if they already have one)

back windows

per 1

3	4	7	8	
2	5	6		9
1		10		

front

door

Before beginning the worksheet, please introduce yourself and exchange contact information. Have each person describe (in 30 seconds) the best thing they did this summer. One person from each group needs to gather up the numbers and put them on my desk. Please write your name (include nickname) on the seating chart that is coming around

back windows per 3

3	4	7	8
2	5	6	9
	1		10

front

door

Before beginning the worksheet, please introduce yourself and exchange contact information. Have each person describe (in 30 seconds) the best thing they did this summer. One person from each group needs to gather up the numbers and put them on my desk. Please write your name (include nickname) on the seating chart that is coming around

At 10:10 we get books (5 min before end of period)

Equation Solving Worksheet.

Name: _____

1. Annie believes she can double the amount of money she has in her savings account each month. She has \$10 at the beginning of the first month.

\$10, \$20, \$40, \$80,.....

a. Write an equation that will model the amount of money, y , she has in the account at the beginning of the x^{th} month. Check to make sure that when $x = 4$, $y = 80$.

b. Without using your grapher, what will be the shape of the graph?

2. Alex believes he can add \$10 to his account each month. He has \$1000 at the beginning of the first month.

\$1000, \$1010, \$1020, \$1030,...

a. Write an equation that will model the amount of money, y , he has in the account at the beginning of the x^{th} month. Check to make sure that when $x = 3$, $y = 1020$.

b. Without using your grapher, what will be the shape of the graph?

3. In order to find out how many months it will take for her account to grow bigger than his, what system would we need to solve? (you don't have to solve it yet.)

4. Solve the following equations algebraically.

a. $1000 + 10(x-1) = 5000$

b. $10 \cdot 2^{x-1} = 120$

5. Why is it more difficult to solve $1000 + 10(x-1) = 10 \cdot 2^{x-1}$?

6. Graph the equations from 1a and 2a on the same set of axis. Be sure to use a good window! What is the answer to problem 3? Show a sketch of your graph and indicate the window.

HW: Solve the following equations. Please show all of your work. If you must graph it to solve it, please show a sketch of your graph, and include your window.

1. $76(x - 2) + 40 = 3(x + 5)$

2. $\frac{3}{x} = \frac{x}{12}$

3. $5^x = 125$

4. $3 + 2^x = -18(x - 10)$

5. $18 + 2 \cdot 7^x = 100$

6. $2^x - 10 = -4^x$

7. $(x-1)(x+5)(x+16)(2x-1)=0$

8. $x^2 + 3 = 2x + 5$