

# Precalculus Newsletter

February 2013

## Welcome

*To Precalculus*

B.M.C. Durfee High School Math Department

Welcome to the second half of the school year of Precalculus. Students have been exposed to algebraic, numerical, graphical and verbal methods for representing problems. Students are urged to solve their problems using one method and to support or confirm their solutions using a different method. Students must learn the value of each of these methods of representation and must learn to choose the one that is most appropriate for solving the particular problem at hand.

### What Students Are Studying?

Students are currently studying a unit on Exponential and Logarithmic functions. Students are being asked to use exponential functions to model growth and decay over time, analyze exponential and logarithmic functions and their graphs, evaluate logarithmic and exponential expressions, and solve logarithmic and exponential equations.

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## Helping Your Children Learn Mathematics

According to the U.S. Department of Education, *"In today's highly competitive economy, solid skills in mathematics, including algebra, are necessities—not just for scientists and engineers, but for everyone. Being proficient in mathematics helps to improve students' college and career options and to increase their future income levels. Beyond the education, career and economic benefits, a solid background in mathematics helps students to better understand their world and to become good citizens.*

*And whether or not you completely understand your child's math assignments, you can still help as he or she progresses through school by asking the right questions, helping your child approach the problems with the right attitude, and getting extra help from the teacher or a tutor as needed."*

- Encourage your child to have a positive attitude about learning mathematics.
- Stress the importance of effort. Prompt your child to face challenges positively and to see mathematics as a subject that is important.
- Avoid statements like "I wasn't good at math" or "Math is too hard."

## Extra Help Web Sites

After school extra help is made available by each teacher at a student's request. The following web sites may also be used to learn more about the topics that students are studying:

<http://coolmath.com>

<http://mathway.com>

## A Look Ahead...

After students complete the unit on Exponential and Logarithmic Functions, they will continue their study of transcendental functions through the study of trigonometry. Students will be introduced to the trigonometric functions using algebraic and graphical approaches. They will learn about the units of measure of radians and degrees, will solve right triangles using trigonometry, will evaluate trigonometric functions of any angle, and graph sine and cosine curves.

## Graphing Calculators

Graphing calculators are an integral part of the Precalculus curriculum. Students are expected to use a graphing utility (Recommended TI-84 Plus) to visualize and solve problems. Throughout the course, the students are prompted to recognize that a graph is reasonable, identify all the important characteristics of a graph, interpret those characteristics, and confirm them using their calculators. By using this method to analyze numerous graphs presented in examples and in their homework, students develop excellent graph-viewing skills.

This term, students will be given a graphing calculator assessment to test the skills that they have acquired in using this tool.

## Math Club

**Advisor: Mr. Steven Carter**

The Math Club meets on Thursday afternoons. Anyone interested in participating in this club can see Mr. Carter in IMC 7. All Students are welcome.

## Durfee's 3 Big Shifts in Instruction

1. Building knowledge through content rich non-fiction
2. Reading, writing and speaking grounded in evidence from text, both literary and informational
3. Regular practice with complex text and its academic language

## Important Dates

Here are some important dates that you should be aware of:

Report Cards Issued: 2/1/13

Early Release Day: February 14, 2013

February Vacation: February 18-22, 2013

No School on March 29, 2013 (Good Friday)

End of Term 3: April 5, 2013

## Faculty e-mail Addresses

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*We all use math every day;  
to predict weather, to tell time, to handle money.  
Math is more than formulas or equations;  
it's logic, it's rationality,  
it's using your mind to solve the biggest mysteries  
we know.*

## Signature Page

Please sign this page and have your child return it to his/her teacher. In addition, please provide us with a current e-mail address where we can send communications such as this newsletter in the future. If you have any questions or comments, please write them below.

Student Signature: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_

Relationship to Student: \_\_\_\_\_

Parent/Guardian e-mail Address: \_\_\_\_\_

Comments/Questions: