

## The Mountain School Algebra II Questionnaire, Spring 2009

Your student \_\_\_\_\_ has signed up to take Algebra II during the spring semester of the Mountain School. Your answers to the following questions will help us to organize a course that will best address the needs of the students in the course.

Title of last year's math class \_\_\_\_\_  
 Title of current math class \_\_\_\_\_  
 Text(s) used for current class \_\_\_\_\_  
 Chapters covered in this text fall semester \_\_\_\_\_  
 Chapters to be covered spring semester \_\_\_\_\_  
 What course will this student be preparing to take senior year? \_\_\_\_\_

**If possible, please have your student bring a copy of your school's algebra text when he/she comes to the Mountain School.**

Do you currently use graphing calculators (if so, which)? \_\_\_\_\_  
*We have TI83s to loan to students and can arrange for the purchase of calculators.*

Using *Algebra and Trigonometry* by Foerster, Addison-Wesley as a text we cover the standard topics for an algebra II course. We would, however, like to have the flexibility to explore as many mathematical topics as possible which relate to our surroundings and situation. It would, therefore, be very helpful for us to know what is expected of our students by their own schools.

**Please check below those topics being covered by your program this fall and those that will need to be covered here at the Mountain School in the spring. Any comments about the rigor with which topics are treated would also be helpful. If you use Foerster, it is sufficient to list the chapters covered each semester.**

<u>fall 08</u>	<u>spring 09</u>	
_____	_____	functions and relations
_____	_____	coordinates and distances in a plane
_____	_____	graphs of linear functions
_____	_____	lines and their equations
_____	_____	applications of linear relations
_____	_____	systems of linear equations in two variables
_____	_____	systems of linear inequalities in two variables
_____	_____	systems of equations in three variables
_____	_____	determinants
_____	_____	quadratic functions and their graphs
_____	_____	solving quadratic equations
_____	_____	imaginary and complex numbers
_____	_____	solving quadratic systems
_____	_____	exponential equations
_____	_____	exponential functions and graphs
_____	_____	logarithmic equations
_____	_____	logarithmic functions and graphs
_____	_____	exponential growth and decay
_____	_____	rational algebraic expressions
_____	_____	graphs of rational functions
_____	_____	long division of polynomials
_____	_____	factoring polynomials
_____	_____	applications of factoring
_____	_____	circles - graphs and equations
_____	_____	ellipses - graphs and equations
_____	_____	hyperbolas - graphs and equations

