

Test #2 will be given on Friday, October 15. It will include material from Sections 3.1 - 3.8. Using the regression feature of your calculator will not be on the test.

MAKEUP POLICY REMINDER:

If you know in advance that you have to miss a quiz or test, you can make arrangements with me to take the quiz or test **before** it is given in class. Otherwise, no makeup quizzes will be given.

If you miss an hour test, it may be made up only if you

1. Contact me on or before the scheduled test date. My office telephone number is 301-279-5215. If I am not there, leave a message stating your telephone number clearly and telling me when I can reach you.
2. Can prove that you have a legitimate excuse.
3. Show me all homework on the relevant material.

If you do not meet these conditions, you will not be permitted to take a makeup test and the percentage equivalent of your final exam grade will be substituted for the grade of the missed test. No student will be permitted to take more than one makeup test.

If you require extended time for tests, you must discuss this with me at least two days before the scheduled test date.

To be prepared for this test, you should be able to

- Algebraically determine the vertex, intercepts and axis of symmetry of a quadratic function
- Graph a quadratic function by hand and by using a graphing calculator
- Determine the maximum or minimum of a quadratic function
- Construct a quadratic function if its vertex and another point are given
- Graph power functions and their transformations
- Identify polynomial functions and their degree
- Identify the zeros of a polynomial function and their multiplicity
- Analyze the graph of a polynomial function (See Example 5, p. 207 for the steps)
- Analyze the graph of a rational function by finding the domain, intercepts, asymptotes and holes (See p. 226 for more detailed steps)
- Solve polynomial and rational inequalities algebraically and graphically
- Use the Remainder and Factor Theorems
- List the potential rational zeros of a polynomial function
- Find all zeros (real or complex) of a polynomial function
- Solve polynomial equations
- Utilize the Conjugate Pairs Theorem to find the complex zeros of a polynomial
- Construct a polynomial function with specified zeros
- Solve applied problems involving polynomial or rational functions

Suggested Review Exercises

Chapter 3 (p. 266)/ # 1 - 7 odd, 13 - 19 odd, 20, 21, 22, 23 25, 29, 31, 33, 37, 39, 43, 47, 49, 53, 55, 59, 61, 63, 67, 69, 71, 75, 87, 91 [Hint: This equation is quadratic in x^2 . Try factoring with factors of the type $(x^2 \pm k)$], 95, 99, 106