

TOPICS and Concepts for the Math 92 Advancement Exam

NOTE:

- A scientific calculator similar to a **TI-30XS Multiview** can be used on the test. A cell phone, translator, dictionary, or similar device is never allowed.
- NO formulas will be given
- The problems on the “Samples” exam contain similar to but not exactly like, problems on the actual Advancement Exam. Further, the Advancement Exam may contain problems that are not expressly shown on the “Samples Exam”.

The Advancement Exam for Math 96 may include but will not be limited to the following types of problems:

1. Basic arithmetic operations with real numbers using exponents and the appropriate order of operations.
2. Apply properties of equality to solve linear equations and related application problems.
3. Determine the equation for a linear function and graph it.
4. Perform the basic arithmetic operations with polynomials.
5. Factor polynomial expressions using a variety of methods.
6. Solve quadratic equations by factoring and use of the quadratic formula.
7. Graph quadratic functions.
8. Identify functions from their equations and graphs and use appropriate functional notation.
9. Perform the basic arithmetic operations with rational expressions.
10. Solve systems of linear equations in two variables graphically and algebraically.
11. Solve exponential and logarithmic equations and applications.
12. Apply the correct notation when identifying, simplifying and using arithmetic and geometric series and sequences.