



Algebra II Proficiency Test

Eligibility and Test Information:

- This test is for incoming freshmen who wish to enroll in Precalculus or Honors Precalculus. Students whose transcript shows that they have completed a yearlong Algebra II course or Integrated Math 3 are eligible to take this test, after passing the Algebra I/Geometry proficiency test. Once proficiency on that test has been demonstrated students can make arrangements with the math department chair to take this test.
- Calculators are not allowed for this test.
- The test will take one hour.

Topics include:

1. Algebra properties, such as distributive, associative, commutative.
2. Evaluating algebraic expressions and formulas.
3. Operations with rational numbers: add, subtract, multiply, divide.
4. Equation solving skills.
5. Inequality solving skills.
6. Functions and Relations and their graphs.
7. Sets of Numbers
8. Problem-solving skills and strategies.
9. Word problem applications.
10. Direct and inverse variation.
11. Skills with polynomials: add, subtract, multiply, divide.
12. Properties of exponents.
13. Scientific Notation.
14. Factoring Polynomials.
15. Skills with rational expressions: add, subtract, multiply, divide.
16. Solving factorable and rational equations.
17. Linear Functions.
18. Graphing and solving linear systems and inequalities.
19. Quadratic Functions and Complex numbers.
20. Exponential and Logarithmic Functions.
21. Rational Algebraic Functions.
22. Irrational Algebraic Functions.
23. Quadratic Relations and Systems, Conic Sections.
24. Higher-Degree Functions and Complex Numbers.



- 25. Sequences and Series
- 26. Probability and Combinatorics

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