

Main Criteria: Texas Essential Knowledge and Skills (TEKS)		
Secondary Criteria: Math-U-See Algebra 2		
Subject: Mathematics		
Grade: 10		
Correlation Options: Show Correlated		
Texas Essential Knowledge and Skills (TEKS)		
Mathematics		
TEKS	111.40.	Algebra II, Adopted 2012 (One-Half to One Credit).
STUDENT EXPECTATION	111.40.c.3.	Systems of equations and inequalities. The student applies mathematical processes to formulate systems of equations and inequalities, use a variety of methods to solve, and analyze reasonableness of solutions. The student is expected to:
GRADE LEVEL EXPECTATION	111.40.c.3.A.	Formulate systems of equations, including systems consisting of three linear equations in three variables and systems consisting of two equations, the first linear and the second quadratic.  Algebra 2 Lesson 28: Coin Problems, Consecutive Integers, and Chemical Mixtures Lesson 29: Age and Boat-in-the-Current Problems
GRADE LEVEL EXPECTATION	111.40.c.3.B.	Solve systems of three linear equations in three variables by using Gaussian elimination, technology with matrices, and substitution.  Algebra 2 Lesson 28: Coin Problems, Consecutive Integers, and Chemical Mixtures Lesson 29: Age and Boat-in-the-Current Problems Lesson 30: Solving Equations with Three Variables
STUDENT EXPECTATION	111.40.c.4.	Quadratic and square root functions, equations, and inequalities. The student applies mathematical processes to understand that quadratic and square root functions, equations, and quadratic inequalities can be used to model situations, solve problems, and make predictions. The student is expected to:
GRADE LEVEL EXPECTATION	111.40.c.4.F.	Solve quadratic and square root equations.  Algebra 2 Lesson 11: Completing the Square
STUDENT EXPECTATION	111.40.c.7.	Number and algebraic methods. The student applies mathematical processes to simplify and perform operations on expressions and to solve equations. The student is expected to:
GRADE LEVEL EXPECTATION	111.40.c.7.E.	Determine linear and quadratic factors of a polynomial expression of degree three and of degree four, including factoring the sum and difference of two cubes and factoring by grouping.  Algebra 2 Lesson 05: Factoring Polynomials; Rational Expressions Lesson 09: Squares, Cubes, and Pascal's Triangle
GRADE LEVEL EXPECTATION	111.40.c.7.F.	Determine the sum, difference, product, and quotient of rational expressions with integral exponents of degree one and of degree two.  Algebra 2 Lesson 02: Rational Expressions

**Note on Mathematical Process Standards (111.40.c.1):**

Texas Mathematical Process Standards apply broadly across all mathematics courses and instructional approaches. Because these standards describe general problem-solving and reasoning practices rather than Algebra II–specific content, they are not listed individually in this alignment. Math-U-See Algebra II supports these process skills throughout instruction.