WORD: **Quadratic Function**	PAGES:
DEFINITION: **a function whose standard form is written $x^2 + bx + c$ where $a, b,$ and c are real numbers and $a \neq 0$. The graph is a parabola.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Quadratic Formula**	PAGES:
DEFINITION: **the formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ which gives solutions, or roots, of a quadratic equation in standard form.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Parabola**	PAGES:
DEFINITION: **the shape of the graph of a quadratic function.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Vertex of a Parabola**	PAGES:
DEFINITION: **the maximum or minimum point on the parabola.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Focus**	PAGES:
DEFINITION: **a fixed point used with a directrix to define a parabola.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Directrix**	PAGES:
DEFINITION: **a fixed line used to define a parabola. Every points on a parabola is equidistant from the directrix and a fixed point called the focus.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Maximum Value of a Function**	PAGES:
DEFINITION: **the y-value of the highest point on the graph of a function.**	

EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Minimum Value of a Function**	PAGES:
DEFINITION: **the y-value of the lowest point on the graph of a function.**	

EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Polynomial**	PAGES:
DEFINITION: **an expression having two or more algebraic terms.**	

EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Standard Form of a Quadratic Equation**	PAGES:
DEFINITION: $Ax^2 + BX + C = 0$**, where** $A, B,$ **and** C **are real numbers and** $a \neq 0$**.**	

EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Standard Form of a Polynomial**	PAGES:
DEFINITION: **a polynomial when the terms are in order from greatest degree to least degree.**	

EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Standard Form of a Linear Equation**	PAGES:
DEFINITION: $Ax + By = C$ **where** $A, B,$ **and** C **are real numbers and** A **and** B **are not both 0.**	

EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Solution Set**	PAGES:	WORD: **Zero of a Function**	PAGES:
DEFINITION: **the set of values that make a statement true.**		DEFINITION: **for the function f, any number x such that $f(x) = 0$.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):	EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Vertex Form of a Quadratic**	PAGES:	WORD: **Discriminant**	PAGES:
DEFINITION: **a quadratic function in the form** $f(x) = a(x - h)^2 + k$**.**		DEFINITION: **the discriminant of a quadratic equation** $ax^2 + bx + c = 0$ **is** $b^2 - 4ac$**; it tells how many real solutions the quadratic function will have.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):	EXAMPLE(S):	COUNTEREXAMPLE(S):

WORD: **Factoring**	PAGES:	WORD: **Completing the Square**	PAGES:
DEFINITION: **the process of writing a number of algebraic expression as a product of factors.**		DEFINITION: **a process used to form a perfect-square trinomial. to complete the square of** $x^2 + bx$ **add** $\left(\frac{b}{2}\right)^2$**.**	
EXAMPLE(S):	COUNTEREXAMPLE(S):	EXAMPLE(S):	COUNTEREXAMPLE(S):