Algebra II Reference Sheet

Quadratic Forms			Axis of Symmetry	$x = -\frac{b}{2a}$
Standard Form	$f(x) = ax^2 + bx + c$		Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Factored Form	$f(x) = a(x - r_1)(x - r_2)$		Imaginary Numbers	$i = \sqrt{-1}$
Vertex Form	$f(x) = a(x - h)^2 + k$		Rational Root Theorem	$\pm\frac{p}{q}$

Series and Sequences		
Arithmetic Explicit	$a_n = a_1 + d(n - 1)$	
Geometric Explicit	$g_n = g_1 \cdot r^{n-1}$	
Arithmetic Series	$S_n = \frac{n(a_1 + a_n)}{2}$	
Infinite Geometric Series	$S_n = \frac{g_1}{1 - r}$	