Unit 2A Review

What is the make-up of the test?	**What topics should I expect to see?**
• 10 Multiple Choice • 11 Short Answer You will have the whole class period to complete this test. Come with specific questions if you have them before the test as there will be no review.	• Key Features of a Parabola • Transformations • Factoring • The different forms of quadratics • Graphing Parabolas

Test Tips:

- Use your calculator to check your work.
  - Does your factored form match the graph of the standard form?
  - Is the vertex/x-intercepts correct once I plug my form in to graph?
  - Need to find the factors of a number? Put it into y= (your number)/x then check the table.
  - Need to find the greatest common denominator to factor out? Go to Math → Num → 9
    - gcd(#,#) Output will be what you need to factor out!

Djifferent Forms:

Standard Form: $y = ax^2 + bx + c$	This is what you get when you expand the other forms!!
Intercept Form: y = a (x – p) (x – q)	x-intercepts will be (p , 0) and (q , 0). *Remember, x is always opposite of what is in parenthesis. *Other names for x-intercepts include roots, zeros and solutions.
Vertex From: y = a $(x - h)^2 + k$	Vertex: (h ,k) *Remember the x-value is opposite of what is in parenthesis the y-value keeps the sign of k.

Factoring:

How to factor when a is 1:	*How to factor when a is not 1:*
Find two numbers that multiply to c and add to b when looking at standard form! Say these numbers are s and t. Your factored form is now y= (x + s) (x + t)! *Remember s and t keep their signs when we factor!	Find two numbers that multiply to (ac) and add to b when looking at standard form! Say these numbers are s and t. Rewrite your equation, in the form: $y = ax^2 + sx + tx + c$ *Continue to factor until you have the most simplified form. (See examples from review)