

Sentences for Quadratics Test Corrections

- 1) To calculate a large power of i , you divide the exponent by four, then make the remainder the new exponent.
- 2) To multiply complex numbers, you FOIL, turn i^2 into -1, then combine like terms.
- 3) To add complex numbers, you combine like terms, making sure you put the i term last.
- 4) To simplify the square root of a negative, you pull an i out then factor the number part to pull out pairs.
- 5) To write a vertex form equation from a graph, you get h and k from the vertex and get a from how much the graph goes up when you go over one step from the vertex.
- 6) To find the equation of a parabola through three points, you put the points in the list on your calculator then STAT \rightarrow CALC \rightarrow QuadReg.
- 7) To change from standard to vertex form, you find h from $-b/2a$, plug in to find k , and steal the a from the original equation.
- 8) To factor a trinomial, you find p and q that multiply to be the first times the last and add to be the middle so you can split the middle term and factor by grouping.
- 9) To factor a difference of squares, you find what you can square to get the first term, what you can square to get the last term, then make conjugates out of them.
- 10) To write the quadratic formula, you have to memorize it: $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$.
- 11) To solve a quadratic equation using the quadratic formula, you find a , b , and c , plug into the formula, then simplify.
- 12) To solve a quadratic equation using the quadratic formula, you find a , b , and c , plug into the formula, then simplify.
- 13) To graph from vertex form, you use h and k to find the vertex, then go over 1, up a on both sides, then sketch the U shape through those points.
- 14) To find roots from factored form, you get them from the parentheses with x (x 's lie).
- 15) To determine the number and type of solutions to a quadratic equation, you find a , b , and c and plug into the determinant, which is $b^2 - 4ac$.
- 16) To decide which form a quadratic is in, you consider the parentheses: two parentheses is factored, which tells the x -intercepts; parentheses squared is vertex, which tells the vertex; no parentheses is standard, which tells the y -intercept.