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 find the vertex of a parabola in vertex form_, you get the x coordinate from the parentheses with the x (x's lie) and the y-coordinate from the last number.

6) 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.

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 eqation_, 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.