Assessment Blueprint - Unit 9 More Quadratic Equations

Unit 9 Overview and Readiness (prerequisite skill assessment)

Item	TEKS
1	A11(A) simplify numerical radical expressions involving square roots
2	A10(E) factor, if possible, trinomials with real factors in the form ax^2+bx+c, including perfect square trinomials of degree two *(from Unit 6)*
3	A3(E) determine the effects on the graph of the parent function $f(x)=x$ when $f(x)$ is replaced by $af(x)$, $f(x)+d$, $f(x-c)$, f(bx) for specific values of a, b, c, and d *(from Unit 4)*

Unit 9 Section A

Item	TEKS
1	A10(F) decide if a binomial can be written as the difference of two squares and, if possible, use the structure of a difference of two squares to rewrite the binomial
2	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
3	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
4	A10(E) factor, if possible, trinomials with real factors in the form ax^2+bx+c, including perfect square trinomials of degree two
5	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula

Unit 9 Section B

Item	TEKS
1	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
2	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
3	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
4	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
5	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula

Unit 9 Section C

Item	TEKS
1	A7(A) graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry
2	A6(B) write equations of quadratic functions given the vertex and another point on the graph, write the equation in vertex form ($f(x) = a(x - h)^2 + k$), and rewrite the equation from vertex form to standard form ($f(x) = ax^2 + bx + c$)
3	A7(A) graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry
4	A6(B) write equations of quadratic functions given the vertex and another point on the graph, write the equation in vertex form ($f(x) = a(x - h)^2 + k$), and rewrite the equation from vertex form to standard form ($f(x) = ax^2 + bx + c$)

Item	TEKS
5	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula

Unit 9 Quiz

Item	TEKS
1	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
2	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
3	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
4	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
5	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
6	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
7	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
8	A7(A) graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry
9	A7(A) graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry
10	A10(E) factor, if possible, trinomials with real factors in the form ax^2+bx+c, including perfect square trinomials of degree two
11	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula

12	A7(A) graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry
13	A7(A) graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry

Unit 9 STAAR Review

Item	TEKS
1	A11(A) simplify numerical radical expressions involving square roots
2	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
3	A7(A) graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry
4	A11(A) simplify numerical radical expressions involving square roots
5	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
6	A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula
7	A6(B) write equations of quadratic functions given the vertex and another point on the graph, write the equation in vertex form ($f(x) = a(x – h)^2 + k$), and rewrite the equation from vertex form to standard form ($f(x) = ax^2 + bx + c$)
8	A10(E) factor, if possible, trinomials with real factors in the form ax^2+bx+c, including perfect square trinomials of degree two
9	A9(B) interpret the meaning of the values of a and b in exponential functions of the form f(x) = abx in real-world problems

| 10 | A2(C) write linear equations in two variables given a table of values, a graph, and a verbal description) |

Unit 9 Project

TEKS
A8(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula