Geary Lesson Plans

Teacher Name	Subject	Grade Level
Danny Blackshear	Algebra II	10-11

Title of Unit/Lesson
Unit 2: Quadratic Functions

Duration of Lesson	Date(s)
15 Days – November 6	10/26/20 – 10/30/20

Learning Goals/Objectives	Language Objectives	Standards
- I can recognize that a quadratic function has different representations (standard form, vertex form, factored form). - I can graph a quadratic function, identify the x and y intercepts, identify the maximum or minimum value, the axis of symmetry, and the vertex using various methods and tools that may include a graphing calculator or appropriate technology. - Recognize the graphs of exponential, radical (square and cube root only), quadratic and logarithmic functions. - I can predict the effects of transformations ($f(x + c)$, $f(x) + c$, $f(cx)$, and $cf(x)$ where c is a positive or negative real-valued constant) algebraically and graphically, using various methods and tools that may include graphing calculators or other appropriate technology.	Teacher - I will use the proper vocabulary and language of mathematics. Student - My students will be reminded to use proper vocabulary at all times.	- A2.A.2.3 - A2.F.1.3 - A2.F.1.2
Learning Targets (list what students should be able to do or understand at each level)		

2.0 Foundational Skills	3.0 Learning Goal/Objective	4.0 More Complex Knowledge
Can the student: • I can simplify linear polynomial expressions. • I can simplify absolute value and radical expressions with help.	Can the student: • I can simplify and evaluate linear, absolute value and radical expressions.	Can the student: • I can simplify and evaluate any algebraic expression to include: ✓ Linear expressions ✓ Radical expressions ✓ Absolute Value expressions ✓ Non-standard expressions • I can interpret the solutions in context.

Assessment & Monitoring (How will you know you've attained the desired effect?)

Constant monitoring. Can the student explain their reasoning? Can the student reproduce independent work?

Instructional Strategies/Lesson Activities/Transitions

Anticipated Date	Assignments	Resources, Materials and Technology Needed
10.26.20	Transformations: • $f(x + c)$ • $f(x) + c$ • $f(cx)$ • $cf(x)$	N/A
10.27.20	Quadratic Functions: • Completing the square.	N/A
10.28.20	Quadratic Functions: • Review unit 2.	N/A
10.29.20	Quadratic Functions: • Review unit 2.	N/A
10.30.20	Quadratic Functions: • Begin unit 2 exam.	N/A

Adaptations and Accommodations (ELL, Special Education, Gifted, Those without Support)

Hand-picked elbow partners, calculators, additional time on assignments, reduced number of items.

Vocabulary:

Quadratic	Minimum	Domain	Parabola
Axis of symmetry	Focus	Vertex	Maximum
Range	Standard form	Vertex form	Directrix
Quadratic	Minimum	Domain	Parabola
Axis of Symmetry	Focus	Vertex	Maximum
Range	Standard Form	Vertex Form	Directrix
y-intercept	x-intercept	Set Notation	Interval Notation
Latus Rectum			