Chapter 5 - Objectives and Assignments

Lesson	Objectives	Assignment
5.1	○ I can describe transformations of a quadratic in vertex form including: ▪ horizontal/vertical translations ▪ vertical stretch and compression ▪ if it opens upward or downward ○ I can sketch a quadratic equation using the above transformations.	12-16, 20-27
5.2	○ Given a quadratic equation in standard form, I can find: ▪ the axis of symmetry ▪ the vertex ▪ the y-intercept ▪ if it opens upward or downward ▪ if it has a maximum or minimum at its vertex ▪ sketch a graph ○ I can find the above information using my calculator.	12-60 (multiples of 3)
Factoring Practice	○ I can factor quadratic equations using: ▪ common term factoring ▪ trinomial factoring (a = 1) ▪ trinomial factoring (a ≠ 1) ▪ difference of squares	**Day 1:** "Donut/Pie" Worksheet **Day 2:** "Piano/Sheep" Worksheet
5.3	○ I can use factoring to find x-intercepts (a.k.a roots, zeros). ○ Given x-intercepts, I can find a quadratic equation. ○ I can find x-intercepts on my calculator.	21-38
5.4	○ I can complete the square to find x-intercepts. ○ I can complete the square to convert a quadratic from standard form to vertex form.	**Day 1:** 26-31 **Day 2 :** 32-38
	Quiz 5.1 – 5.4	
5.5	○ I understand the concept of an imaginary and complex number. ○ I can simplify radicals with negative values to an expression in terms of i. ○ I can find x-intercepts or solve equations that evaluate to expressions involving i. ○ I can find a complex conjugate of a complex number.	18-54 (multiples of 3), 66, 69
5.6	○ I can use the quadratic formula to find x-intercepts or solve a quadratic equation. ○ I can use the discriminant to determine how many x-intercepts or solutions a quadratic equation has. ○ I can use the quadratic formula to find imaginary x-intercepts or solutions.	18-51 (multiples of 3)
5.8	○ I can use differences to determine if data is quadratic. ○ Given 3-points, I can setup and solve a system to find a quadratic equation that fits the data points. ○ I can use quadratic regression on my calculator to find a quadratic equation of best fit for a set of data. I can then use that equation to make future predictions.	3-15 (multiples of 3), 29, 36
5.9	○ I can add, subtract, multiply and divide two complex numbers. ○ I can find the absolute value of a complex number. ○ I can graph a complex number. ○ I can simplify large powers of i.	37-51 (odd), 55-69 (odd)
	Quiz 5.5 – 5.9	
Review-Pg. 396		1-17, 21-26
	Chapter 5 Test	