## **Common Core Readiness Assessment 3 Report**

Common Core State Standards	Test Items	Number Correct	Proficient? Yes or No	Mathematics II Lesson(s)
Number and Quantities				
<b>N.Q.2</b> Define appropriate quantities for the purpose of descriptive modeling.	23			12–3
<b>N.CN.1</b> Know there is a complex number $i$ such that $i^2 = -1$ , and every complex number has the form $a + bi$ with $a$ and $b$ real.	5			12-8
<b>N.CN.2</b> Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.	6			12-8
N.CN.7 Solve quadratic equations with real coefficients that have complex solutions.	35			12-8
Algebra				
A.SSE.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.	9, 10			12-5, 12-6
A.CED.1 Create equations and inequalities in one variable and use them to solve problems.	19			12–4, 12–5, 12–6, 12–7
A.CED.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.	8, 13			12-4, LL12-4
<b>A.REI.4</b> Solve quadratic equations in one variable.	11, 12, 14, 16, 18, 20, 21, 22, 32			12-4, 12-5, 12-6, 12-7, 12-8
A.REI.7 Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.	24, 28			12–10
Functions				
F.IF.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.	3, 15, 20, 27, 31, 33, 34			12–1, 12–2, 12–3
F.IF.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.	4, 29			12-1, 12-3
F.IF.6 Calculate and interpret the average rate of change of a function over a specified interval. Estimate the rate of change from a graph.	36			AL12-2

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F.IF.7.a Graph linear and quadratic functions and show intercepts, maxima, and minima.	2			12-11
F.IF.8.a Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.	7			12-6
<b>F.BF.1</b> Write a function that describes a relationship between two quantities.	1, 30			12-2, 12-9
<b>F.BF.3</b> Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$ , $kf(x)$ , $f(kx)$ , and $f(x + k)$ for specific values of $k$ ; find the value of $k$ given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology.	17			12-1, TL12-1, 12-2
Statistics and Probability				
S.ID.6.a Fit a function to the data; use functions fitted to data to solve problems in the context of the data.	37			12-9
S.CP.1 Describe events as subsets of a sample space using characteristics of the outcomes, or as unions, intersections, or complements of other events.	38			13-1, 13-4
<b>S.CP.3</b> Understand the conditional probability of $A$ given $B$ as $P(A \text{ and } B)/P(B)$ , and interpret independence of $A$ and $B$ as saying that the conditional probability of $A$ given $B$ is the same as the probability of $A$ , and the conditional probability of $B$ given $A$ is the same as the probability of $B$ .	25			13-6
<b>S.CP.7</b> Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$ , and interpret the answer in terms of the model.	26			13–4