## Summer IXL for Rising PreCalculus Select ALGEBRA II

All sections to SmartScore of 70 or higher, unless otherwise denoted for remedial work.
Completing all sections below to the SmartScore of 70 will be recorded as two quiz grades of 100. Incomplete sections will result in lowered quiz grades. Each section is worth approximately 5 points off the quiz grades if not completed. This is a required assignment.

## NEW! Students should bring this sheet AND printed verification of their work on the first day of class.

- To access this information, sign into IXL and choose "Analytics" across the top green menu bar.
- After selecting Analytics, choose "Scores" in the new white menu bar populated.
- Ensure the correct grade is selected in the drop-down to the left of the screen (ALGEBRA II).
- Click the print icon to the right of the SCORE CHART.
- You can use this to check your progress, ensure your SmartScores are brought to a 70 or greater, and cross-check with the sections below to ensure you have completed them all.

Section B: Equations

| Topic | SmartScore |
| :--- | :--- |
| Solve Linear Equations |  |
| Solve Absolute Value Equations |  |
| Solve Multi-Variable Equations |  |

Section C: Inequalities

| Topic | SmartScore |
| :--- | :--- |
| Solve Linear Inequalities |  |
| Solve Absolute Value <br> Inequalities |  |
| Solve Quadratic Inequalities |  |

Section D: Functions

| Topic | SmartScore |
| :--- | :--- |
| Find Values Using Function |  |
| Graphs |  |
| Write the Equation of a Linear <br> Function |  |

Section E: Systems of Equations

| Topic | SmartScore |
| :--- | :--- |
| Solve a Syste of Equations by <br> Graphing |  |
| Solve a System of Equations by <br> Using Substitution |  |


| Solve a System of Equations |  |
| :--- | :--- |
| Using Elimination |  |
| Solve a System of Equations |  |
| Using Any Method: Word |  |
| Problems |  |

Section F: Systems of Inequalities

| Topic | SmartScore |
| :--- | :--- |
| Solve Systems of Linear <br> Inequalities by Graphing |  |

Section G: Matrices

| Topic | SmartScore |
| :--- | :--- |
| Add/Subtract Scalar Multiples of <br> Matrices |  |
| Multiply Two Matrices |  |
| Solve Matrix Equations |  |

Section I: Complex Numbers

| Topic | SmartScore |
| :--- | :--- |
| Add/Subtract/Mutiply/Divide <br> Complex Numbers |  |

Section J: Factoring

| Topic | SmartScore |
| :--- | :--- |
| Factor by Grouping |  |
| Factor Polynomials |  |

## Section K: Quadratic Functions

| Topic | SmartScore |
| :--- | :--- |
| Graph a Quadratic Function |  |
| Solve a Quadratic Equation <br> Using Square Roots |  |
| Solve a Quadratic Equation by <br> Factoring |  |
| Complete the Square |  |
| Solve a Quadratic Equation <br> Using the Quadratic Formula |  |
| Write a Quadratic Function from <br> Its Zeros |  |

## Section L: Polynomials

| Topic | SmartScore |
| :--- | :--- |
| Divide Polynomials Using Long |  |
| Division |  |
| Divide Polyomials Using <br> Synthetic Division |  |
| Match Polynomials and Graphs |  |

Section M: Radical Functions \& Expressions

| Topic | SmartScore |
| :--- | :--- |
| Simplify Radical Expressions wit <br> Variables I |  |
| Add/Subtract Radical <br> Expressions |  |
| Solve Radical Equations |  |

Section O: Rational Functions \& Expressions

| Topic | SmartScore |
| :--- | :--- |
| Rational Functions: Asymptotes <br> and Excluded Values |  |
| Simplify Rational Expressions |  |
| Multiply/Divide Rational <br> Expressions |  |
| Add/Subtract Rational <br> Expressions |  |
| Solve Rational Equations |  |

## Section P: Function Operations

| Topic | SmartScore |
| :--- | :--- |
| Composition of Linear Functions: <br> Find an Equation |  |
|  <br> Relations |  |

## Section Q: Families of Functions

| Topic | SmartScore |
| :--- | :--- |
| Function Transformation Rules |  |
| Transformations of Functions |  |

Section S: Logarithms

| Topic | SmartScore |
| :--- | :--- |
| Convert Between Exponential <br> and Logarithmic Form: All Bases |  |
| Properties of Logarithms: Mixed <br> Review |  |

Section T: Exponential \& Logarithmic Functions

| Topic | SmartScore |
| :--- | :--- |
|  <br> Graphs |  |
| Solve Exponential Equations <br> Using Common Logarithms |  |
| Solve Logarithmic Equations I |  |

## Section V: Circles

| Topic | SmartScore |
| :--- | :--- |
| Write Equations of Circles in |  |
| Standard Form Using Properties |  |
| Graph Circles |  |

## Section Y: Angle Measure

| Topic | SmartScore |
| :--- | :--- |
| Convert Between Radians and <br> Degrees |  |
| Graphs of Angles |  |

Section Z: Trigonometry

| Topic | SmartScore |
| :--- | :--- |
| Pythagorean Theorem \& Its <br> Converse |  |
| Special Right Triangles |  |
| Trigonometric Ratios: Sin, Cos, <br> and Tan |  |
| Trigonometric Ratios: Find a <br> Side Length |  |
| Trigonometric Ratios: Find an <br> Angle Measure |  |
| Solve a Right Triangle |  |

Updated June 2023, DavisPatteson.

