Focused Standards are in blue.

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| **Algebra 2 Common Core State Standards** |
| **Conceptual Category** | **Domain** | **Cluster/Essential Learning Goal** |
| Number and Quantity | The Real Number System (N-RN) | ELG.MA.HS.N.1: Extend properties of exponents to rational exponents.  |
| Quantities (N-Q) | ELG.MA.HS.N.3: Reason quantitatively and use units to solve problems.  |
| The Complex Number System (N-CN) | ELG.MA.HS.N.4: Perform arithmetic operations with complex numbers.  |
| ELG.MA.HS.N.6: Use complex numbers in polynomial identities and equations.  |
| Algebra | Seeing Structure in Expressions (A-SSE) | ELG.MA.HS.A.1: Interpret structures of expressions.  |
| ELG.MA.HS.A.2: Write expressions in equivalent forms to solve problems. |
| Arithmetic with Polynomials and Rational Expressions (A-APR) | ELG.MA.HS.A.4: Understand the relationship between zeros and factors of polynomials. |
| ELG.MA.HS.A.5: Use polynomial identities to solve problems.  |
| ELG.MA.HS.A.6: Rewrite rational expressions. |
| Creating Equations (A-CED) | ELG.MA.HS.A.7: Create equations that describe numbers or relationships.  |
| Reasoning with Equations and Inequalities (A-REI)  | ELG.MA.HS.A.8: Understand solving equations as a process of reasoning and explain reasoning.  |
| ELG.MA.HS.A.9: Solve equations and inequalities in one variable.  |
| ELG.MA.HS.A.10: Solve systems of equations.  |
| ELG.MA.HS.A.11: Represent and solve equations and inequalities graphically.  |
| Functions | Interpreting Functions (F-IF) | ELG.MA.HS.F.1: Understand the concept of a function and use function notation.  |
| ELG.MA.HS.F.2: Interpret functions that arise in applications in terms of the context.  |
| ELG.MA.HS.F.3: Analyze functions using different representations.  |
| Building Functions (F-BF) | ELG.MA.HS.F.4: Build functions that model a relationship between two quantities.  |
| ELG.MA.HS.F.5: Build new functions from existing functions.  |

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|  | Linear, Quadratic, and Exponential Models (F-LE) | ELG.MA.HS.F.6: Construct and compare linear, quadratic, and exponential models and solve problems.  |
| ELG.MA.HS.F.7: Interpret expressions for functions in terms of the situation they model.  |
| Trigonometric Functions (F-TF) | ELG.MA.HS.F.8: Extend the domain of trigonometric functions using the unit circle. |
| ELG.MA.HS.F.9: Model periodic phenomena with trigonometric functions.  |
| ELG.MA.HS.F.10: Prove and apply trigonometric identities.  |
| Geometry | Expressing Geometric Properties with Equations (G-GPE) | ELG.MA.HS.F.11: Translate between the geometric description and equations for conic sections.  |
| Statistics and Probability | Interpreting Categorical and Quantitative Data (S-ID) | ELG.MA.HS.S.1: Summarize, represent, and interpret data on single count or measurement variables.  |
| ELG.MA.HS.S.2: Summarize, represent, and interpret data on two categorical and quantitative variables.  |
| Making Inferences and Justifying Conclusions (S-IC) | ELG.MA.HS.S.4: Understand and evaluate random processes underlying statistical experiments.  |
| ELG.MA.HS.S.5: Make inferences and justify conclusions from sample surveys, experiments, and observational studies. |
| Conditional Probability and the Rules of Probability (S-CP) | ELG.MA.HS.S.6: Understand independence and conditional probability and use them to interpret data.  |
| ELG.MA.HS.S.7: Use the rules of probability to compute probabilities of compound events in a uniform probability model.  |