Math Priority Standards – Alg. III

Below is a table of the priority standards.

Priority Standards	Description
A.CED.3	**(all)** Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. *For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.* ★ -*KSDE Flipbooks**
G.GPE.4	**(+)** Derive the equation of a parabola given a **focus** and **directrix;** graph the parabola in the coordinate plane.
G.GPE.5	**(+)** Derive the equations of ellipses and hyperbolas given the foci, using the fact that the sum or difference of distances from the foci is constant; graph the ellipse or hyperbola in the coordinate plane.
F.IF.4	**(all)** For a function that models a relationship between two quantities, interpret key features of expressions, graphs and tables in terms of the quantities, and sketch graphs showing key features given a description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. ★ -*KSDE Flipbooks**
F.IF7.(dfg)	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. ★ • F.IF.7d. **(+)** Graph piecewise-defined functions, including step functions. ★ • F.IF.7f. **(+)** Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. ★ • F.IF.7g. **(+)** Graph trigonometric functions, showing period, midline, and amplitude. ★ -*KSDE Flipbooks**
F.TF.2	**(+)** Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.
N.CN.9	**(+)** Extend polynomial identities to the complex numbers. *For example, rewrite* $x^2 + 4$ *as* $(x + 2i)(x - 2i)$.
S.ID.3	**(+)** Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are

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	data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.

**Kansas Department of Education has created 'Flipbooks' for current standards that detail each standard, including examples and resources to support in understanding the depth of the standard.*