## Vocabulary Toolkit

	Term	Definition / Additional Information
5.2 T	boundary line	The boundary for a linear inequality. The points on it are part of the solution set if it is a solid line ( $\leq$ or $\geq$ ), or not part of the solution set if it is a dashed line ( $<$ or $>$ ).
5.2 T	constraint	Something that limits or restricts someone or something.
5.10 T	dependent system	A system that has an infinite set of solutions, since both equations actually describe the same line.
5.9 T	Elimination Method	The process of eliminating one of the variables in a system of equations using addition or subtraction in conjunction with multiplication or division to solve a system of equations.
5.5 T	feasible region	The solution set of all points in a system of inequalities that satisfy given constraints of situation in a context (there may be additional implied constraints that are not a part of the system of inequalities).
5.10 T	inconsistent system	A system that has no solutions, since the lines are parallel.
5.3 S	intercept	The <i>x</i> -intercept of a line is the point at which the line crosses the $x$ axis, where the y value equals 0. <i>x</i> -intercept :( $x$ , 0)
		The y-intercept of a line is the point at which the line crosses the y axis, where the x value equals 0. y-intercept: $(0, y)$
5.3 T	linear equation	An algebraic equation in which each term is either a constant or the product of a constant and (the first power of) a single variable.
5.2 T	solution or solution set	Any and all value(s) of the variable(s) that satisfy an equation, inequality, system of equations, or system of inequalities. With a system of equations or inequalities, the solution set is the set containing value(s) of the variable(s) that satisfy <u>all</u> equations and/or inequalities in the system.
5.7 T	system of equations	A set or collection of equations.
5.5 T	system of inequalities	A set or collection of inequalities.