Unit 2 Glossary Terms

constraint

A limitation on the possible values of variables in a model, often expressed by an equation or inequality or by specifying that the value must be an integer. For example, distance above the ground , in meters, might be constrained to be non-negative, expressed by $d \geq 0$.

model

A mathematical or statistical representation of a problem from science, technology, engineering, work, or everyday life, used to solve problems and make decisions.

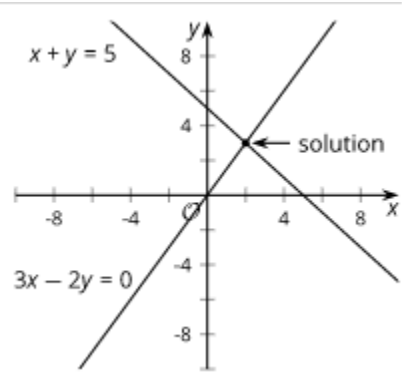
Equivalent equations

Equations that have the exact same solutions are equivalent equations.

Solution to a system of equations

A coordinate pair that makes both equations in the system true.

On the graph shown of the equations in a system, the solution is the point where the graphs intersect.



System of equations

Two or more equations that represent the constraints in the same situation form a system of equations.

substitution

Substitution is replacing a variable with an expression it is equal to.

elimination

A method of solving a system of two equations in two variables where you add or subtract a multiple of one equation to another in order to get an equation with only one of the variables (thus eliminating the other variable).

Equivalent systems

Two systems are equivalent if they share the exact same solution set.

Solutions to a system of inequalities

All pairs of values that make the inequalities in a system true are solutions to the system. The solutions to a system of inequalities can be represented by the points in the region where the graphs of the two inequalities overlap.

System of inequalities

Two or more inequalities that represent the constraints in the same situation form a system of inequalities.