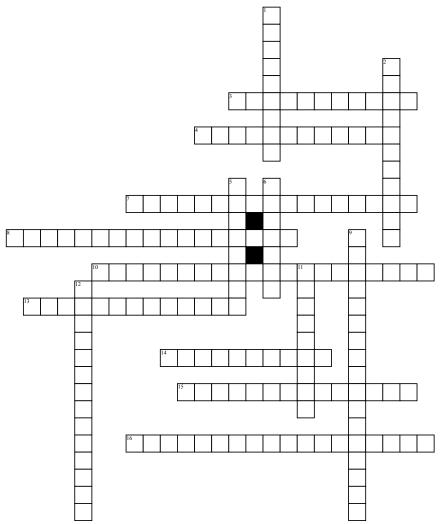
Chapter 3



Across

- **3.** When a system of equations that has no solutions.
- **4.** A system of equations that has no solutions
- 7. The process of finding the maximum or minimum values of a function for a region defined by inequalities
- **8.** A set of equations with the same variables
- **10.** A set of inequalities with the same variables
- **13.** The coordinates of a point in space. the solution of a system of equations in three variables.

Word Bank

CONSISTENT
BOUNDED
LINEAR PROGRAMMING
FEASIBLE REGION
INCONSISTENT
ORDERED TRIPLE

- **14.** A system of equations that has at least one solution.
- **15.** The point at which the income equals the cost
- **16.** A method of solving a system of equations in which one equation is solved for one variable in terms of the other

Down

- **1.** When a system of linear equations has an infinite number of solutions.
- **2.** conditions given to variables, often expressed as linear inequalities
- **5.** To seek the optimal price or amount that is desired to minimize costs or maximize profits.

- **6.** A region is ____ when the graph of a system is a polygonal region.
- **9.** Eliminate one of the variables in a system of equations by adding or subtracting the equations
- **11.** A system of inequalities that forms a region that is open
- **12.** The intersection of the graphs in a system of constraints.

SYSTEM OF INEQUALITIES CONSTRAINTS SYSTEM OF EQUATIONS OPTIMIZE SUBSTITUTION METHOD

ELIMINATION METHOD BREAK-EVEN POINT UNBOUNDED DEPENDENT INDEPENDENT