## **GUIDED NOTES – 7.2 SYSTEMS OF LINEAR EQUATIONS: THREE VARIABLES**

## **LEARNING OBJECTIVES**

In this section, you will:

- Solve systems of equations in three variables.
- Identify inconsistent systems of equations containing three variables.
- Express the solution of a system of dependent equations containing three variables.

## SOLVING SYSTEMS OF EQUATIONS IN THREE VARIABLES

- Write out the 4 step process for solving for three unknowns, given a linear system of three equations.
  - 1.
  - 2.
  - 3.
  - 4.

*Try It:* Read Examples 2 and 3 in the text, then answer the following.

Solve the following system of equations in three variables.

$$2x + y - 2z = -1$$
$$3x - 3y - z = 5$$
$$x - 2y + 3z = 6$$