**In-Class Activity/Homework – Linear Systems**

1. Previously, you were given a question that started with a verbal context and then you were asked to write the linear system for the situation.

a. Below is a linear system. Write a question with context that would yield this system.



1. Solve the system of linear equations from **part a**. Show all **algebraic** work.
2. Interpret the result from **part b** with respect to the context you provided in **part a**.

**Notes**

1. The student activities department of FLC plans to rent buses and vans for a spring-break trip. Each bus has 40 regular seats and 1 handicapped seat; each van has 8 regular seats and 3 handicapped seats. There are exactly 320 regular and 36 handicapped seats required for this trip. How many of each type of transportation will be needed to meet these requirements?
	1. Define the variables of this situation.

B, # of buses (IV)

V, # of vans (DV)

* 1. Write the system of equations that represents this situation.

40b+8v=320

B+3v=36

* 1. Solve the system you wrote in **part b**.
	2. Interpret **part c** in the context of the situation.

There are 10 vans and 6 buses needed for the trip.